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**Good Reading about Automobiles, Motors and  
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**VOL. I.**

**NEW SERIES**

**No. 18.**

# MOTOR AGE

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**THE CYCLE AGE**

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**Containing Splendidly Illus-**  
**trated Report of Long Island**  
**Automobile Club's Endur-**  
**ance Test     :     :     :     :**

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**CHICAGO, MAY 1, 1902**

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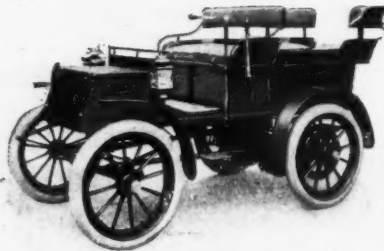
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'Busses  
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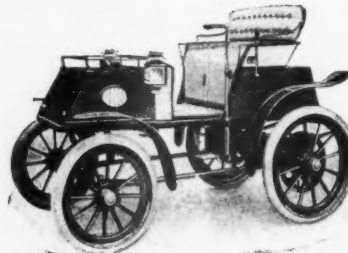
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# MOTOR AGE

WITH WHICH IS INCORPORATED CYCLE AGE

VOL. 1. No. 18.

CHICAGO, MAY 1, 1902.

\$2.00 PER YEAR

## The 100 Mile Endurance Race



The second annual 100-mile endurance test of the Long Island Automobile Club occurred on Saturday last. There were eighty-two entries and sixty-seven starters. Unfortunately a great many competitors imagined they were engaged in a race and so many of them arrived at the finish in advance of the minimum time allowed under the rules that the greatest uncertainty exists as to the awards to be made by the officers. The legal limit of speed would have made it impossible to arrive in less than 6 hours and 40 minutes, hence, when the machines commenced to arrive an hour and a half in advance of time the officials declined to time them. About fourteen carriages arrived before any official times were taken and it was announced that all transgressors would be disqualified. In the absence of official information the following list has been prepared from our own observations, but it does not represent the order of arrival, and until the decision of the officers is announced it is deemed inadvisable to publish the unofficial times, gathered by Motor Age men from the observers and taken by themselves.

The machines said to have been marked for disqualification, with details concerning them are:

Fournier-Searchmont, R. A. Greene, 12 horse, 1,800 pounds, 2 passengers.

Fournier-Searchmont, F. Alton, 12 horse, 1,700 pounds, 2 passengers.

Fournier-Searchmont, E. B. Gallaher, 12 horse, 1,700 pounds, 2 passengers.

Panhard, Dr. Lyman, 12 horse, 2,200 pounds, 4 passengers.

DeDion, Kenneth A. Skinner, 8 horse, 1,250 pounds, 2 passengers.

Darracq, American Darracq Co., 9 horse, 1,250 pounds, 2 passengers.

Long Distance, F. E. Lewis, 7 horse, 1,200 pounds, 2 passengers.

Knox, Knox Automobile Co., 6 horse, 1,300 pounds, 2 passengers.

Oldsmobile, C. C. Singer, 4 horse, 700 pounds, 2 passengers.

Darracq, F. A. La Roche, 9 horse, 1,300 pounds, 2 passengers.

Toledo, International Co., 7½ horse, 1,400 pounds, 2 passengers.

Long Distance, I. W. England, 7 horse, 1,200 pounds, 2 passengers.

Long Distance, J. M. Schmidt, 7 horse, 1,200 pounds, 2 passengers.

Locomobile, Locomobile Co., 3½ horse, 950 pounds, 2 passengers.

All of these carriages arrived at least one hour in advance of the limit.

In class A for steam vehicles, weight and power unlimited, the White carriages seem to have captured not only the honors in their class but for all classes in the run. The figures have been

computed from the reports furnished by the timers in advance of the publication of the official record and may be subject to slight changes. It appears, however, that the three White carriages came nearer than any other to the time set by the rules. Of the three only one stopped on the way, Mr. White himself stopping a little over two minutes. The unofficial record is as follows:

White, White Sewing Machine Co., 6 horse, 1,350 pounds, 2 passengers; 6:40:21.

White, White Sewing Machine Co., 6 horse, 1,350 pounds, 2 passengers; 6:41:15.

White, White Sewing Machine Co., 6 horse, 1,350 pounds, 2 passengers; 6:41:20.

Prescott, H. M. Wells, 4½ horse, 1,100 pounds, 2 passengers; 7:04:30.

Century, Wm. Van Wagoner, 8 horse, 2,000 pounds, 2 passengers; 7:06:30.

Locomobile, Locomobile Co., 3½ horse, 950 pounds, 2 passengers; 7:06:45.

Lane, Lane M. V. Co., 9 horse, 1,350 pounds, 4 passengers; 7:07:30.

Toledo, A. G. Southworth, 7½ horse, 1,500 pounds, 2 passengers; 7:09:45.

Lane, Lane M. V. Co., 4 horse, 825 pounds, 2 passengers; 8:02:00.

Prescott, W. H. Wells, 4½ horse, 1,100 pounds, 2 passengers; 8:21:15.

Serpellet, W. P. Kennedy, no details, 4 passengers; 8:56:00.

Grout, B. L. Wright, 4 horse, 900 pounds, 2 passengers; 9:03:00.

Locomobile, L. Abraham, 4½ horse, 900 pounds, 2 passengers; 9:50:15.

It should be remembered that the number and duration of stops, by which the officials will be governed in making awards, are not considered in the above or succeeding tables.

There was but one entry and no starter in class B, for electric carriages of all weights and powers. Times in other classes, were as follows:

### Class C, gasoline vehicles under 1,000 pounds:

Automotor, A. H. Funke, 5 horse, 820 pounds, 2 passengers; 6:20:15.

Oldsmobile, Oldsmobile Co., 4 horse, 800 pounds, 2 passengers; 6:58:15.

Knickerbocker, Ward-Leonard Co., 6½ horse, 990 pounds, 2 passengers; 6:58:15.

Torbensen, Torbensen Gear, Inc., 5 horse, 800 pounds, 2 passengers; 7:06:15.

Pierce, P. F. Pierce, 3½ horse, 700 pounds, 2 passengers; 7:07:45.

### Class D, gasoline vehicles between 1,000 and 2,000 pounds

Gasmobile, W. H. Owen, 9 horse, 1,900 pounds, 2 passengers; 5:58:00.

Haynes-Apperson, G. M. Brown, 9 horse, 1,950 pounds, 2 passengers; 6:22:30.

Knickerbocker, Ward-Leonard Co., 5 horse, 1,010 pounds, 2 passengers; 6:22:45.

Winton, Percy Owen, 8 horse, 1,800 pounds, 2 passengers; 6:35:30.

Packard, Ohio Auto Co., 12 horse, 1,995 pounds, 2 passengers; 6:37:00.

Winton, Percy Owen, 15 horse, 1,950 pounds, 4 passengers; 6:38:15.

Peerless, Peerless Mfg. Co., 16 horse, 1,600 pounds, 2 passengers; 6:38:15.

Peerless, Peerless Mfg. Co., 16 horse, 1,600 pounds, 2 passengers; 6:39:00.

Peugeot, Central Auto. Co., 10 horse, 1,920 pounds, 2 passengers; 6:39:40.

Panhard, J. I. Blair, 16 horse, 2,600 pounds, 4 passengers; 6:44:00.

Knickerbocker, Ward-Leonard Co., 5 horse, 1,010 pounds, 2 passengers; 6:45:00.

Packard, Ohio Auto. Co., 12 horse, 1,997 pounds, 2 passengers; 6:50:30.

Elmore, Patterson & Shaw, 5 horse, 1,000 pounds, 2 passengers; 6:51:30.

Autocar, W. J. Stewart, 1,000 pounds, 2 passengers; 6:52:28.

Haynes-Apperson, Michael Piel, 9 horse, 1,950 pounds, 2 passengers; 6:56:00.

Peerless, L. G. Youngs, 16 horse, 2 passengers; 7:05:00.

Gasmobile, Henry C. Cryder, 9 horse, 2,000 pounds, 2 passengers; 7:06:20.

Haynes-Apperson, H. S. Chapin, 6 horse, 1,250 pounds, 2 passengers; 7:11:00.

Peerless, Banker Bros. Co., 16 horse, 1,700 pounds, 2 passengers; 7:15:32.

Long Distance, A. J. Lamme, 7 horse, 1,000 pounds, 2 passengers; 7:26:40.

Knickerbocker, Ward-Leonard Co., 5 horse, 1,050 pounds, 4 passengers; 7:26:45.

Haynes-Apperson, Haynes-Apperson Co., 9 horse, 1,900 pounds, 2 passengers; 7:59:30.

#### Class E, gasoline vehicles over 2,000 pounds:

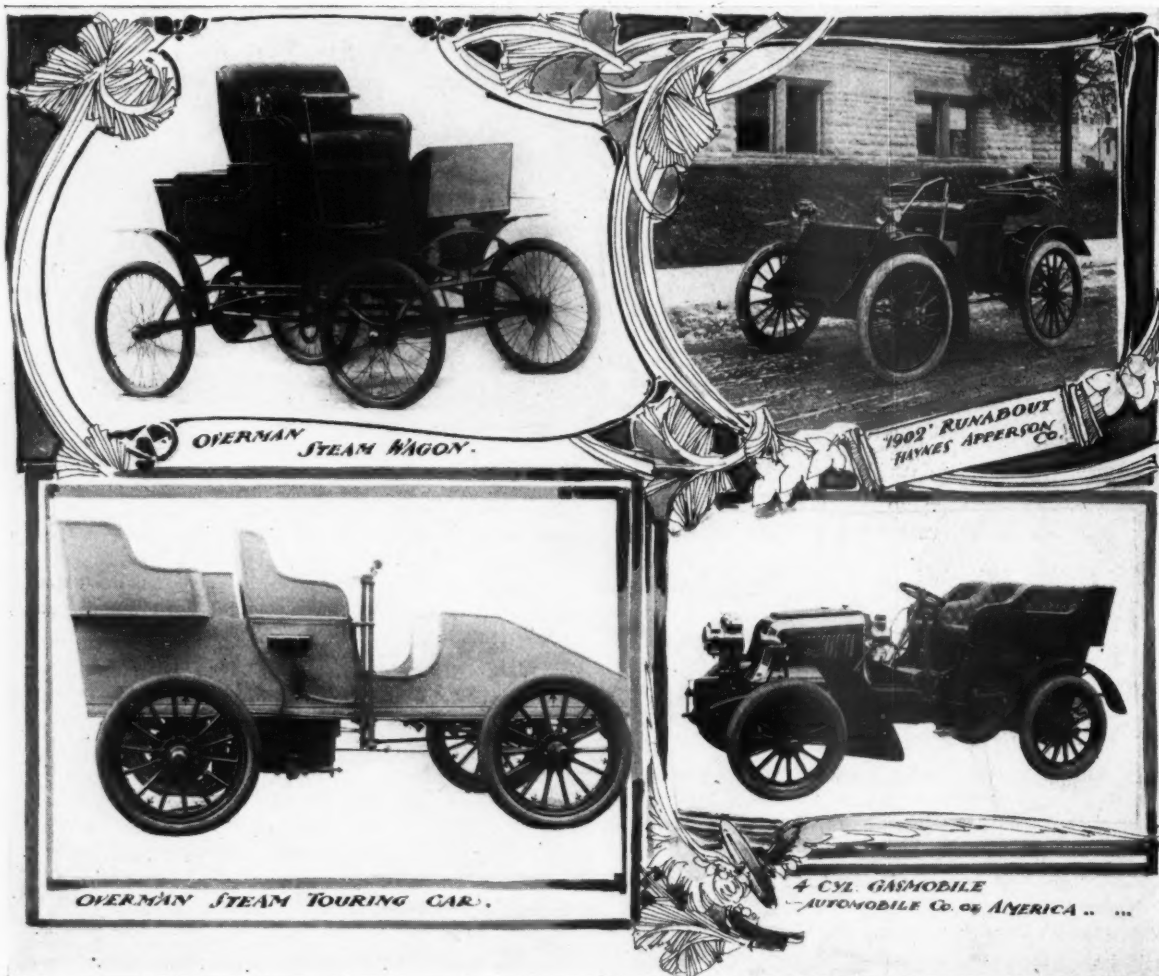
Wheel Within Wheel, Wheel Within Wheel Co., 9 horse, 2,400 pounds, 3 passengers; 6:32:00.

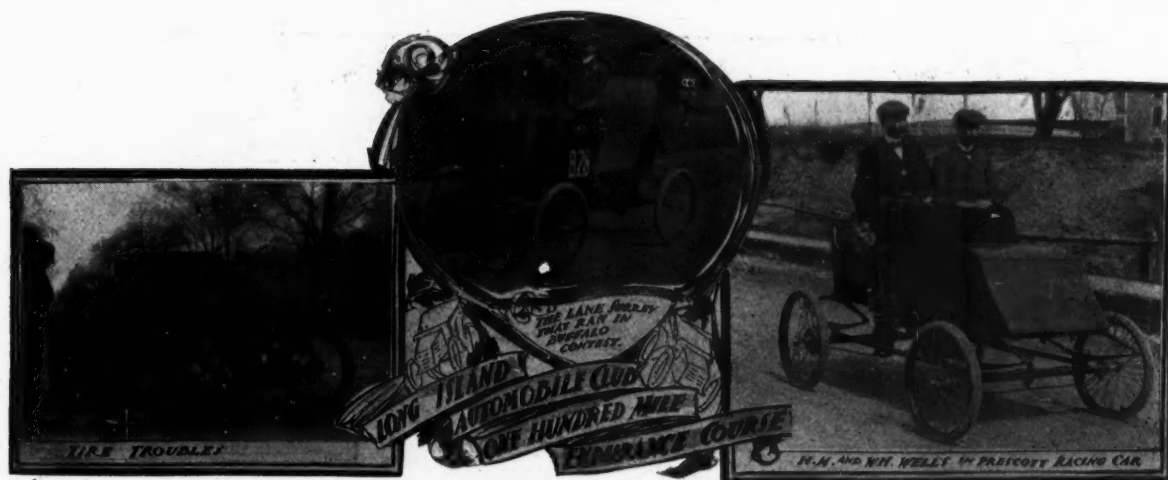
Panhard, E. E. Britton, 16 horse, 4 passengers; 6:46:10.

Gasmobile, M. G. Foster, 7 horse, 2,210 pounds, 3 passengers; 7:11:00.

Rochet-Snyder, Ernest Cuenod, 12 horse, 2,100 pounds, 4 passengers; 10:04:30.

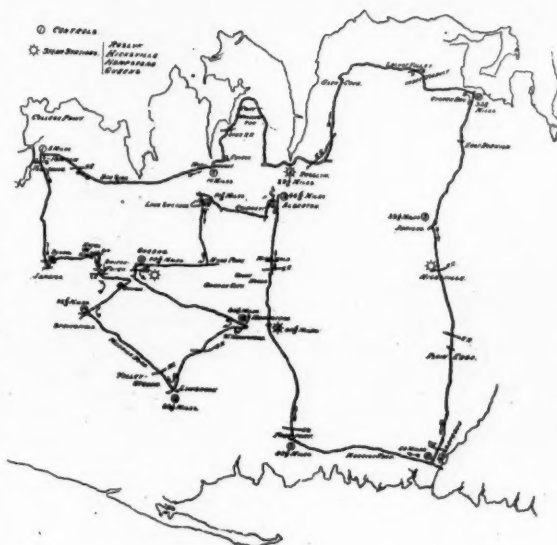
Some of the observers who have never been in an automobile before were physical wrecks when they arrived at Jamaica, which may account for the many failures to report at headquarters as instructed. One man had to be assisted out of his seat and could hardly stand. Notwithstanding this he was full of enthusiasm. "Say," he yelled to a MOTOR AGE man, "I've had the ride of my life. Somebody please come and dig the dust from my eyes." When last seen he was being helped in the direction of the recuperating department of Pettit's Hotel.





New York, April 27.—

Looking back at the 100-mile non-stop contest of the Long Island Automobile Club, which occurred last Saturday, one is obliged to admit that the excellent fellows who promoted it deserved better treatment than they received at the hands of some of the people who participated therein. For months the club has been preparing for the event. Its members have worked earnestly to sustain the reputation they achieved last year. The club is composed of a set of men who have done everything in the power of an influential body to promote the well-being of the



the automobiling fraternity, and have, above all things, insisted on the rights of other users of the highways to consideration at the hands of devotees of this latest form of locomotion. They conduct their runs in a restricted territory and over roads lined by the dwellings of people who are well aware of their rights and of the laws made for the government of automobiles. Hence it was not entirely creditable to competitors to forget that the event of Saturday was a test only, and in no sense a race and to convert the home of their hosts into a race track.

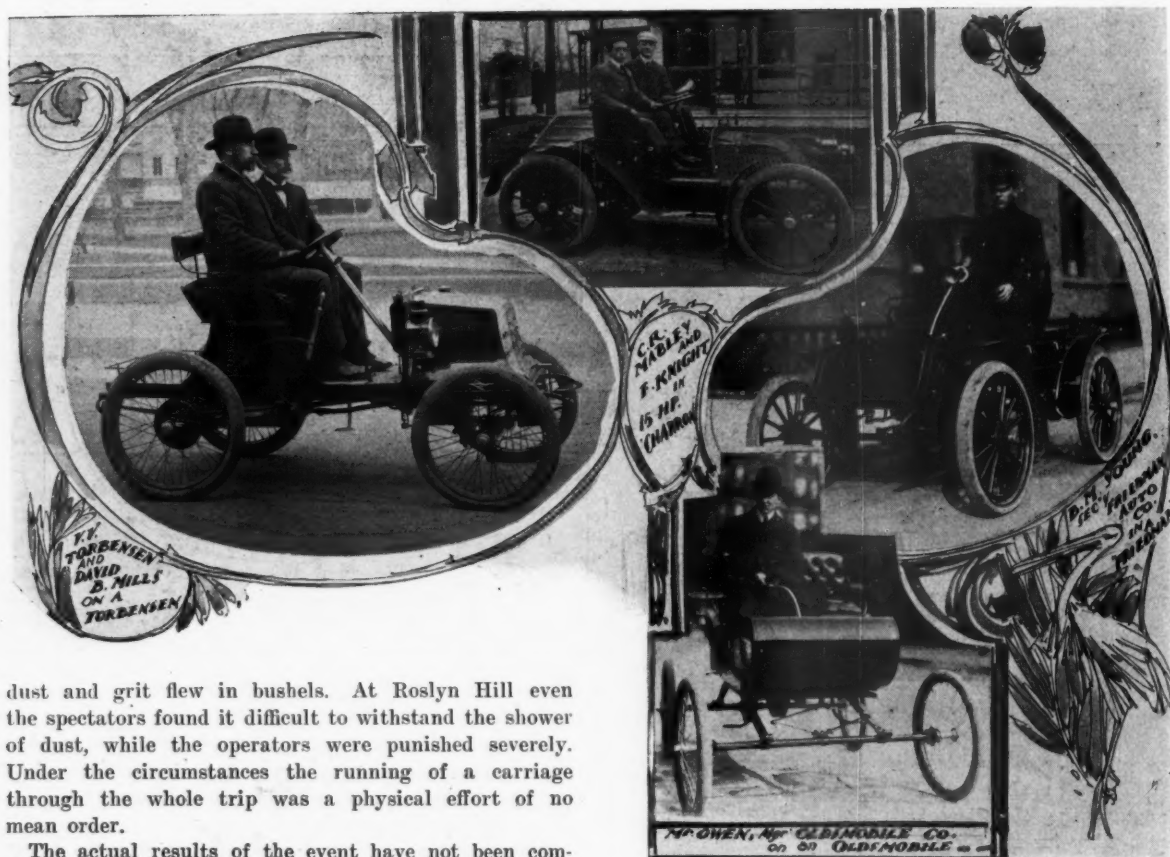
The event demonstrated conclusively, first, that unless ruled with an iron hand, the owners of some of the fast machines will defy the law without hesitation, and, second, that the 100-mile non-stop test within the legal limit of speed, as a feature of importance, has seen its day and no longer reflects glory on the machines which participate. The automobile has so far outgrown its swaddling clothes as to need no further booming of the kindergarten variety.

When one day last week the committee announced the entries closed it was found that eighty-two names figured on the list. This was so eminently satisfactory to the club that it looked forward to the run with keen anticipation of pleasure. And, so far as a majority of the competitors are concerned, the realization was as pleasurable as the anticipation. But several things conspired to prevent perfect satisfaction. For this the competitors were largely to blame. The rules provided for the assembling of the vehicles in a large open space at the side of the hotel, there to answer to the

call of the officials in charge, to take on their numbers and to be assigned their observers. First the gentlemen assigned to the important positions of observers were late in arriving. The competitors were seemingly more anxious to show their machines in motion than to pay attention to the desires of the officials, and as a result it proved impossible to assemble them in the orderly style on which the club had counted. They were finally sent away in somewhat straggling fashion, though with due care as to the timing. At the hill and at the checking stations throughout the officers did their work well and not a complaint was heard about the management in that respect. The finish was, of course, a long-drawn-out affair, for vehicles commenced to arrive over an hour before the appointed time and straggled in as late as 10 o'clock. By the time the last machine came in few people were on hand to welcome them.

The weather was hardly propitious, but was more trying to the operators than to the machines. A terrific wind was blowing all day, and the roads, being dry,





dust and grit flew in bushels. At Roslyn Hill even the spectators found it difficult to withstand the shower of dust, while the operators were punished severely. Under the circumstances the running of a carriage through the whole trip was a physical effort of no mean order.

The actual results of the event have not been completed. The officials were hard at it all day today (Sunday) checking the reports of the men in charge of controls, official timekeepers and observers. Some of the latter failed to respond promptly to the call of duty, and late tonight Mr. Pardington, chairman of the press committee—one of the most competent and obliging of men, by the way—said that it would be impossible to make an official announcement of the results before Wednesday night—the time at which *MOTOR AGE* goes to press. The results given at the head of this report are the result of the observations of *MOTOR AGE*'s own men and are in no sense official. It is likely, however, that they will compare closely, so far as they go, with the official record.

Many of the competitors had apparently failed to pay any attention to the conditions of the contest. After they had gone over the course in time which proved violation not only of the rules of the contest, but of the laws of the state, they protested against the club's refusal to acknowledge their arrival by taking their time officially. They claimed that no intimation had been given them of the time limit, and this despite the fact that rule two stated explicitly that "the speed limit should be 15 miles an hour." A great many machines, according to the figures available at present, arrived too early, and, according to the declaration of an officer of the club, will be disqualified. Indeed, one officer

stated that if any member had been guilty he would be invited to resign his membership.

The result of all this will delay in arriving at the final official statement. Even the decision in the hill-climbing contest cannot be announced, for the reason that disqualification may make it impossible to award the prizes to the machines which made the best times.

### BY ONE OF THE OBSERVERS

A 9 horsepower Darracq touring car, owned by Chas. D. Cook, of Paterson, N. J., and driven by M. Papillion, a professional chauffeur, and carrying a representative of *MOTOR AGE*, covered the 100-mile course of the Long Island Automobile Club in 5 hours 2 minutes, and did it against a 60-mile gale for three-quarters of the distance, without making a stop. Considering the number of hills and the stiff wind a surprisingly small quantity of gasoline (only 4½ gallons) was consumed.

We assembled for the start at Petit's Hotel, Jamaica, at 9 a. m. and at 9:59 received the word to "Go!" Turning to the left, we ran along the Flushing road to the village of Flushing, the first control, 5 miles out, which we reached at 10:15. Then we turned to the right, toward Bay Side, passing, at 10:20, No. 64, the Long



START AT JAMAICA

MANHATTAN HILL

RECEIVING TURN AT PLANDOME MILLS

LEAVE AT EAST NORWICH L.I.

BEGINNING OF CLIMB AT ROSLYN HILL

FIRST STEAM CATERING AT THIRD NEW HAVEN TURN - 22 MILES OUT

LONG ISLAND AUTO CLUB LEAVING OUT THE COURSE

FIRST TURN AFTER CAMPING HALL AT ROSLYN

FIRST HAILING GRANT COY. A. R. PARKER GRANT AT JERICHO L.I.

FIRST TURN AT FERRIS

L. N. ADAMS - 1ST PRES. C. J. FIELD O. R. FARRINGTON



Island Motor Co.'s 3,500-pound repair truck of 24 horsepower, carrying six passengers. It was the first machine passed, and was evidently in trouble. Shortly afterward, at 10:25, we were passed by "a large cloud of dust and considerable noise," which we learned later contained the Panhard-Levassor, driven by M. Voigt,

open up a little, so throwing in the second speed gear we bowled along toward Port Washington, passing on the hill No. 27, a Torbensen gear, with a disconsolate representative sitting on a soap box beside the driver, and No. 80 at 10:55 and 10:56, respectively, and No. 39 at 10:59. Making the turn at Port Washington, we passed

No. 8 (Pierce) at 11:00 and headed for Roslyn, the third control, passing Nos. 73, 23, 44 and 77 in rapid succession.

We passed the control at Roslyn, 22½ miles, at 11:14 and put on full speed for the hill. Roslyn hill is 2,800 feet long, with three bends, and an average grade of 8.2 per cent, with a sharp rise of 14 per cent at the top. "Pop" threw in the low speed gear shortly after we reached the grade, and our little machine made no work of running away from the one directly behind it, and climbing the hill in 2 minutes 42½ seconds.

At 11:19 we passed No. 45, a 9 horsepower Haines-Apperson. On the Roslyn turnpike



Early Morning at the Starting Point.

that covered the course in the record time of 2 hours and 52 minutes.

At 10:30 we overhauled Nos. 24, 25 and 26, the White Sewing Machine Co.'s steam carriages, which, like "Athos, Porthos and Aramis," were always within call, in case of trouble.

At 10:32 we passed No. 42, a 5 horsepower Knickerbocker, carrying two ladies in the tonneau. At 10:43 we passed No. 14, the Lane Motor Vehicle Co.'s steamer, and at 10:48 No. 62, one of the U. S. Long Distance Auto. Co.'s machines, with a punctured tire.

By this time the clouds that hung heavy and threatening at the start had cleared and the sun was shining, but the wind that had so kindly chased away the clouds stayed with us and was out for business, and despite the rain of the night before blew clouds of dust in our faces.

At 10:54 we passed through Manhasset, the second control, 14 miles out, making the run in 55 minutes. "Pop," the chauffeur, was by this time evidently getting nervous, as the pace was too slow. We decided to



A. C. A. Members at Roslyn Hill.

at Locust Valley we picked up Nos. 33, 38 and 39; the latter was a 12 horsepower Packard, weighing 1,995 pounds, made by Ohio Auto Co., and was holding an argument with No. 4, a 9 horsepower Darracq, weighing 1,300 pounds, as to who would be first under the viaduct at Locust Valley we picked up Nos. 33, 38 and 29; the chance for a scrap, he put on all speed and we settled the question for them by passing them at 11:34. As we

made the turn to the right after leaving the viaduct, we could see them still at it, with No. 4 in the lead.

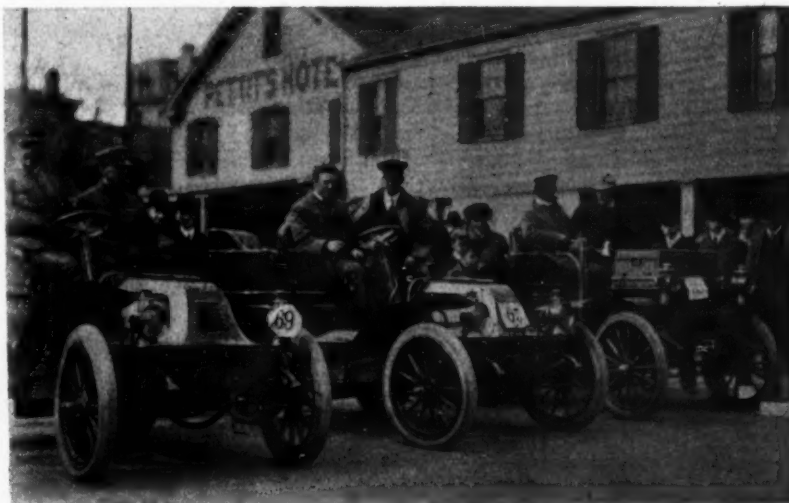
Just before reaching the control at Oyster Bay, we overtook and passed No. 70, at 11:40, and at 11:41 passed the fourth control, 33½ miles, making the run in 1 hour 42 minutes.

From Oyster Bay through East Norwich, Jerico, Hicksville and Plain Edges to Massapequa is 16½ miles, nearly a straight road, with the wind dead ahead and blowing a gale. The sand stung like needles and at times it was necessary to almost come to a full stop, the dust was so thick. It was impossible to see a rod ahead, and the wind literally blew through us.

At 11:53 we passed No. 18 making a repair on motor. At 12:08 No. 6 was overtaken; the dust was so thick that we did not see them till we almost collided. At 12:13 we passed the control at Jericho. At 12:15, just before reaching Hicksville, we passed No. 22, with a punctured tire.

At 12:08 No. 6 was overtaken; the dust was so thick that we did not see them till we almost collided. At 12:13 we passed the control at Jerico. At 12:15, just before reaching Hicksville, we passed No. 22, with a punctured tire.

At 12:16 we passed the steam station at Hicksville as No. 5 was leaving, after taking on water for the



Three Searchmonts—photographed before the limit had expired.



Emil Voigt and J. E. Ewing in 24 horsepower Panhard.

ville and Plain Edges to Massapequa is 16½ miles, nearly a straight road, with the wind dead ahead and blowing a gale. The sand stung like needles and at times it was necessary to almost come to a full stop, the dust was so thick. It was impossible to see a rod ahead, and the wind literally blew through us.

At 11:53 we passed No. 18 making a repair on motor.

run to Hempstead. We saw nothing but dust from there to Massapequa, the sixth control, 50 miles, which we passed at 12:38.

Between Hempstead and Albertson we passed a large machine, a Mors or Panhard, I thought, jacked up with part of a stone wall that was handy and using a fence rail for a lever, with a rear tire off.

From Queens to West Hempstead, control No. 12, we bowled along at a 20-mile clip, passing there at 1:59. From West Hempstead to Lynbrook, the thirteenth my, strong and hearty as control, we met our old enemy, with his gritty friend

dust, but fought our way through and passed the control at 2:20, 88½ miles.

From Lynbrook to Springfield, the fourteenth control, we took things easy, passing No. 16, which was loafing, at 2:34, and passed control 14 at 2:39, reaching the starting point at 3:02. Time for 100 miles, 5 hours and 2 minutes.

### *From a Spectacular Standpoint*

From the viewpoint of the outsider, who cared more for great numbers of road locomotives plunging in bunches or in a continuous string along the highway and the swift and thunderous passage of man's latest speed creation, and knew naught of legalized non-stop plugging and illegitimate record flights, Saturday's 100-mile endurance run was one great spectacle of massed vehicles at the start, of an unbroken procession along the highway and of dust-grimmed, dare-devil drivers at the finish. It indeed furnished a spectacle from dawn to sunset that might well enthrall others than the thousands of simple Long Island folk.

As a notable gathering of automobiles and automobilists it was far more impressive than the start and roadside views of last autumn's long-distance run to Buffalo. There were no more vehicles entered; but there was the increased interest that comes from a short, sharp struggle that is to be decided in a few hours as compared with a long week's grind with results purely mechanical and technical. The hundreds of outsiders and most of the insiders knew that when four score high-powered road vehicles are to be sent off on a journey with an end to it not many hours away the inborn sporting blood that flows in the veins of every human being that has something that can go a wee bit faster than pedal locomotion will carry him, will not allow him to let the other fellow pass him without a struggle. There might be a majority of pluggers for non-stop honors, who would keep within the rules; but there were sure to be racers, and your millionaire, your farmer, your hoodlum, your everybody loves a race.

A MOTOR AGE man en route to the start passed through the Long Island railroad station at Hunter's Point. A

locomotive. "Say, mommer, if I put in a quarter would the engine go five times as fast?" asked the boy. There was the outcropping of the innate human love of speed.

The general public is interested in the automobile because it can go, and go a little bit faster, it fancies, than any other moving thing on earth. Man may make



Darracq Climbing the Hill.

rules and argue until he is blue in the face in behalf of a test that will show strength of construction and a long and useful slow-going vehicle life. Man proposes, but the great American public and the owner of the thing that can go disposes; and so the crowd gathered small boy stood by a nickel-in-the-slot mechanical toy to see a race and not a run.

To forget the speculators and turn to the participants for a moment.

Pettit's Hotel, an old-fashioned Long Island inn, made up after the manner of its kind, principally of a bar room, secondarily of an adjoining room containing four over-worked billiard tables, frayed at the edges, and incidentally of two mildewed parlors and a dozen musty slumber boxes, was the headquarters of the run. On two sides of the tavern was a great stable yard with capacious barn and an extended stretch of shed. A month ago all of mine host's rooms were bespoken, and a week before the run the overflow had filled the



Awaiting the Arrivals at Jamaica.



rest of Jamaica's hostilities. Harry Palmer also had a party of contestants out at the Interstate Sportsmen's Association club house not far distant. Some sat up all night in the bar room and filled their "alcohol tanks." The barn and shed were jammed with vehicles.

With the crack of dawn the chauffeurs began to pile down stairs and out on the veranda. At that hour fog and mist presaged a dark day of it, if not a repetition of the rain storm of last year. The heavy power brigade yawned confidently and the light squadron groaned with an apprehension that it was "up against it."

An hour after sun-up behind the clouds, the automobile army began to arrive. Entrants, who wished to be on hand early, with time for the final touches and inspection, came first. Then followed the motor vehicle mob. Albert C. Bostwick, with his head bandaged from a recent operation, ran over early in his new red 12-horse Panhard. The A. C. A. run, with ten "rain or shiners," arrived at 9 o'clock.

All this time A. R. Pardington, the man of system, was upstairs dealing out badges, maps, score cards and meal tickets to the official observers. Each observer's ration consisted of four deviled-chicken sandwiches, four hard-boiled eggs, four pickles, four olives, four bananas and two packages of maccaroons. There were drinkables, of course, added by the vehicle occupants for human fuel consumption. Some carried them in addition in bottles, and the judges did not search any one for concealed flasks. Some also stocked up with soda, to be used, probably, for cleansing valves. Outside Frank G. Webb, clerk of the course, was scurrying around the yard and up and down the street giving out contestants' numbers and trying to answer a dozen questions at a time.

The inn yard was now a jam of vehicles, operators,

observers and curious ones, and the main street of town, through which the run was to pass, had a large slice of Jamaica's population strung along it. The goat-whiskered farmer and the lanky Reuben of comic journalism were there in real life and gazed in open-mouthed astonishment on the new life around them.

"Wal, I swan!" drawled an octogenarian tiller of Long Island soil. "I've seen a lot of big sights in my life, but I never seen the like of this one."

Big men in the American trade rubbed elbows everywhere. Not a make was entered but had some one of its "main guys" on hand. Europe, too, was represented in the person of M. Emile Voigt, of J. Charron, Girardot & Voigt, of Paris, a bicycle-capped, long-coated, smooth-faced, rather undersized young man. M. Ernest Cuenod, president of the Automobile club of Switzerland and representing foreign makers in several big deals completed or now on, was there, too. Both were to be in the run. M. Voigt took the MOTOR AGE contingent to a shed in a back yard and showed them a handsome green-bodied, 24-horsepower Panhard he had sold J. E. Ewing, of the Financier, for \$12,000 the day before. It had won its spurs by finishing second in the Paris-Toulouse run last autumn. Voigt and Ewing mounted their machine for a snap shot by the MOTOR AGE photographer.

"If some one will take our time so as to verify our watches on the outside," said Mr. Voigt, "we would like to run over the course independently to see how good a gait we can maintain."

How they started among the tail-enders, passed the leader between Massapequa and Freeport and finished in 2:52:00, establishing an unofficial hundred-mile record, is told elsewhere. Several watches verified this time, and the MOTOR AGE learned at several points that their Panhard had passed, so time and distance made are



Ernest Cuenod and His Rochet-Schneider.



Kenneth Skinner and His De Dion.

pretty well authenticated. At the finish they reported they had gone astray from the course once and thought they had lost at least 5 miles thereby.

By the time seventy-seven observers had drawn their numbers, received their stock in trade and found the vehicles to which chance had allotted them, it was seen that it was too late to send them away in the order of their numbers on the programme, as had been intended. Their stations in the line should have been allotted and marked before the start. This would have enabled the observers to find them readily and the clerk of the course to have sent them off in order at the prescribed intervals. The L. I. A. C. committee, however, had not realized the delay this omission would cause. Trust it to correct it next time. The A. C. A. will probably profit by the lesson.

The emergency was there, however, and had to be met. To hesitate was to be lost. It was grappled and conquered promptly by the most feasible plan under the circumstances. The few were sent off in numerical order. After that they were dispatched and timed as fast as they reached the starting point. The first to get away was a Prescott at 9:34 and the Rochet-Schneider at 10:51 last, an average interval of 1:10 between departures.

After a score or more vehicles had been started the newspaper men, who were to report what was doing along the course, took a special train made up of a parlor car and an engine for an observation trip to various points of interest and importance to be passed by the run. It had been furnished by H. B. Fullerton, a member of the L. I. A. C. and also an official of the L. I. R. R. A merry crowd of old-timers and newspaper boys swapped lies and jokes between stops. The train reached the top of Roslyn Hill shortly after the first machine had gone up and in time to see Voigt and Ewing make the upward rush at a railroad speed just as David Wolfe Bishop had done up Nelson Hill in the Buffalo run. The improvement in the climbing qualities of the vehicles over last year was apparent. On Nelson Hill, though, of course, a bit harder climb, the stops were frequent. On Roslyn Hill a stop or even a hard struggle was an exception. The hill is 2,800 feet long, has three turns, has an average grade of 8.2 per cent, with a 14 per cent hump near the top. At the foot of the hill the approaching vehicles were warned of the climb coming by megaphone. In fact, this megaphonic instruction was carried out all along the line, where officials were stationed at checking and supply controls.

After most of the vehicles had made the climb the party boarded the train once more and was off to Hempstead. The village presented a typical sight. Crowds surrounded the checkers and lined the streets. There seemed to be no trouble about finding the course, for every possible turn was marked R or L to indicate the direction to be taken.

Before Jamaica was reached, in ample time for the arrivals within the speed limit, the naughty fellows of the flying squadron had begun to come in. The officials paid no attention to them and did not take their times. These were obtained later from the observers

or calculated from the starting times combined with the times of the watches of the bystanders.

About 4 o'clock, as the time limit recognized by the rules drew near, the clerk of the course and the official timers returned to their stations and begun to take down the arrival and time of the incomers within the rules. Thirty-two of them had arrived by 6 o'clock.



Packard Awaiting Word to Start.

Eleven more came in during the evening, making forty-three legal finishers, besides the disqualified ones, fifty-eight in all so far as can now be told.

Each vehicle was required to carry an official observer appointed by the club. There were seventy-nine volunteers, of whom seventy-seven reported for duty.

Of the vehicles entered fifteen were of foreign make and sixty-seven American. Of the latter forty-two were made east of and twenty-five west of Buffalo.

#### Notes of the Run

The run was preceded on Friday night by a smoker, to which all automobilists were invited and at which one of the features was a complete description of the course by Mr. Fullerton, illustrated by lantern slides. Mr. Fullerton, by the way, is a special agent of the Long Island railroad, and is familiar with every inch of the road. The course itself is in some respects ideal. At no part of it is the vehicle over a dozen miles from the start, but this, of course, makes a great many abrupt turns necessary. So well had everything been arranged, however, that no one who paid attention to the map and the waterproof map with which each operator was provided had the least trouble in following the right road, and few complaints were heard on that score.

Roslyn Hill, the scene of the hill-climbing test, is an ideal place for a severe trial of the hill-climbing possibilities of the automobile, though wider, firmer and less steep than Nelson Hill. It is 2,800 feet long, has three turns, none of them particularly abrupt, has an average rise of 8.2 per cent, and at the last few rods the rise



is 14 per cent. It is macadamized, but on Saturday was so covered with dust that this fact was hardly discernible.

One or two breezy things in the line of costumes were to be seen ostentatiously displayed by men whose positions should induce them to sink personal aggrandizement, if such they consider such exhibitions, instead of making the automobilist the laughing stock of the spectators.

Blue ribbons are to be awarded to those carriages which made the run within 500 minutes and without a stop; red ribbons for percentages of 99 and 98, for stops of 5 and 10 minutes respectively; yellow ribbons for 97, 96 and 95 per cent, for 15, 20 and 25 minute stops; white ribbons for 94, 93, 92 and 91 per cent, for 30, 35, 40 and 45 minute stops. Percentages between 86 and 90 will be "very highly commended," their stops ranging between 50 and 70 minutes, while between 80 and 85 per cent, allowing for stops of from 75 to 100 minutes, will be "highly commended."

### DECISION OF THE OFFICIALS

NEW YORK, April 30 (Special telegram)—The officials made their announcement of awards tonight. It was decided not to disqualify those vehicles which finished not more than ten minutes inside of the limit. The awards were as follows:

#### BLUE RIBBONS.

Awarded to vehicles which made the run without stops except such as were caused by requirements of personal or public safety, and, in the case of steam vehicles, for fuel and water at official stations:

##### Blue:

6. Toledo, steam, A. G. Southworth.
8. Pierce, gasoline, Percy P. Pierce.
13. Panhard, gasoline, J. S. Blair.
15. Lane, steam, Lane M. V. Co.
24. White, steam, White S. M. Co.
25. White, steam, White S. M. Co.
30. Packard, gasoline, Ohio Auto Co.
33. Century, steam, Wm. Van Wagoner.
38. Elmore, gasoline, Patterson & Shaw.
41. Knickerbocker, gasoline, Ward-Leonard Elect. Co.
42. Knickerbocker, gasoline, Ward-Leonard Elect. Co.
45. Haynes-Apperson, gasoline, H. S. Chapin.
46. Haynes-Apperson, gasoline, H. S. Chapin.
47. Autocar, gasoline, W. S. Stewart.
60. Peugeot, gasoline, Central Auto Co.
72. Olds, gasoline, Oldsmobile Co.
5. Toledo, steam, International M. C. Co.
29. Packard, gasoline, Ohio Auto Co.
56. Winton, gasoline, Percy Owen.
57. Winton, gasoline, Percy Owen.
74. Rocket-Schneider, gasoline, Ernest Cuenod.

#### RED RIBBONS.

Awarded to vehicles whose stops did not exceed 10 minutes.

1. Prescott, steam, H. M. Wells.
11. Peerless, gasoline, Peerless Mfg. Co.
23. Panhard, gasoline, E. E. Britton.
26. White, steam, White S. M. Co.
68. Wheel Within Wheel, gasoline, Wheel Within Wheel Co.

#### YELLOW RIBBONS.

Awarded to vehicles whose stops did not exceed 30 minutes:

5. Toledo, steam, International M. C. Co.
18. Gasmobile, gasoline, M. G. Foster.
21. Gasmobile, gasoline, H. C. Cryder.
27. Torbensen, gasoline, Torbensen Gear, Inc.
35. Peerless, gasoline, L. G. Youngs.
43. Knickerbocker, gasoline, Ward-Leonard Elect. Co.
53. Locomobile, steam, Loco Co. of America.

#### WHITE RIBBONS.

- Awarded to vehicles whose stops did not exceed 45 minutes.
63. Haynes-Apperson, gasoline, Haynes-Apperson Co.
  70. Long Distance, gasoline, A. J. Lamme.

VERY HIGHLY COMMENDED.

54. Grout, steam, B. L. Wright.

HIGHLY COMMENDED.

2. Prescott, steam, W. H. Wells.

#### HILL CLIMBING CONTEST.

Steam vehicles, No. 53, Locomobile, Loco Co. of America, 1m. 42s.

Middle weight gasoline vehicles, No. 56, Winton, Percy Owen, 1m. 42s.

Heavy gasoline vehicles, No. 74, Rocket-Schneider, Ernest Cuenod, 1m. 19s.

### MANUFACTURERS ENTER PROTEST

New York, April 28, 1902.

Long Island Automobile Club, No. 1190 Fulton St., Brooklyn, N. Y.

Gentlemen:—We hereby record our protest against the performance of certain contestants regularly entered and stated in your recent 100 mile endurance contest. We refer to those parties who, with full knowledge of your rules and the State Laws, deliberately and defiantly broke the State Laws and the most important rules of the contest, with the evident intent of using your Endurance Contest as a means of advertising themselves and making the real winners of your contest appear ridiculous in the daily public press records of your contest.

We think that your club should take prompt and vigorous action to place the winners of your contest in a proper light and also to penalize in every way possible those who deliberately did all in their power to disregard your most essential rules and thereby interfere as far as possible with the proper conduct and good results of your contest. Unless the winners of your endurance contests can feel perfect confidence of securing the credit usually given to winners of contests in the public reports of the events, your endurance contests are likely to lose their deserved popularity.

So far as our members are concerned, they do not feel inclined to enter any further endurance contests where any contestants or outsiders are allowed to run over the course among the legitimate competitors while deliberately DISREGARDING the fundamental rules of the contest.

It is our opinion that any and all such parties should be forcibly prevented from running very far over the course during the contest by arrest or such other means as will prove sufficient. In your future endurance contests it would seem essential to the interests of the legitimate competitors that you should have such control over the course or parts thereof as to enable you to forcibly prevent notoriety-seekers from intentionally damaging the value of your awards as was done last Saturday.

It seems evident that mere disqualification is an entirely insufficient method of disciplining such parties who are glad to be disqualified for the advertising effect produced thereby. To arrest them after they have finished may be helpful, but if such parties realize that they cannot possibly run far over the course without being forcibly stopped, they will immediately cease from using for such illegitimate advertising purposes your otherwise very valuable Endurance Contests.

Yours truly,

(Signed.)

THE NATIONAL ASSOCIATION OF AUTOMOBILE MANUFACTURERS

Harry Unwin, Asst. Secy.

# MOTOR AGE

PUBLISHED EVERY THURSDAY BY SAMUEL A. MILES.

Principal Offices: 324 Dearborn Street, Chicago.

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MOTOR AGE is entered at the Chicago Postoffice as second class matter.

TO ADVERTISERS: Copy for advertisements must reach the Chicago office not later than Tuesday morning to insure insertion the same week.

The circulation of Motor Age, guaranteed and proven each week, exceeds 5000 copies. For proof and advertising rates, see last page of reading matter.

MOTOR AGE may be obtained, by any newsdealer, through the Western News Company, Chicago, or any of its branches, which are located in every large city in the United States.

The editor will be glad to receive communications for publication. They must be accompanied by the names and addresses of senders, which will not be used if request be made to that effect. Contributions will not be paid for unless accompanied by notice that payment is expected.

Subscription, Two Dollars a Year. - - Six Months, One Dollar

## DANGERS TO BE AVOIDED

The rapid increase in the automobile business is strikingly illustrated by the present crowded condition of the prominent factories. Business was increasing rapidly before the late show, but the army of purchasers that made its appearance at that time, and since, piled up orders to such an extent that few makers are in a position to do anything but make promises of future deliveries, a condition not at all satisfactory to the people who are willing and anxious to spend their money.

The writer visited three factories last week and in each place met buyers from distant states. Every one of them had to turn back disappointed. This indicates that while a large number of machines will be produced during the season, the automobile has made such inroads in popular fancy that the present demand is far in excess of the capacity, which speaks well for the manufacturers who have gone into the business on a business basis and are prepared to build good serviceable machines in a hurry.

At the same time some concerns are being carried on the tide of prosperity which are bound eventually to go the way of some of the old bicycle companies which entered the business under the same conditions, intending to make money easily out of vehicles that would sell at the time, but only until the rush subsided. Lessons were taught at that time by which many who are now entering the field might profit, for the future certainly holds in store the same experience for many producers of automobiles.

While the trade must, of necessity, pass through the same sifting down, it remains a fact that the present conditions are most favorable and as a result even the banks are looking for opportunities to invest, and are inquiring regarding parts suitable for the construction of vehicles. One concern prominent in the trade received three letters from such institutions last week.

Machine shops with ordinary capacities, boat building establishments, hardware merchants and jobbers, especially in the west, and numerous individuals are about to engage in the industry. Manufacturers who have embarked in the trade and who previously had large businesses on other lines have decided to devote their plants entirely to the production of automobiles. This remark applies particularly to a number who until recently were manufacturers of gas engines, wagons, farm instruments, machinery and other articles in a field where competition was keen and margins comparatively small.

What is the lesson of all this?

The condition reminds the old timer of the days when travelers journeyed forth with bicycle samples, and returned with more orders than the companies for which they were traveling could fill, and this, too, in the face of the fact that they were not always salesmen. In later days, when it took a real salesman to sell the goods, these men were looking for positions. How long will it take for the automobile business to reach the same stage? No one can answer to a certainty. There is no way of telling when prices will become stationary, to what level low priced machines will settle, nor what type will become the standard.

It is safe to assume that while the industry is but just commencing a rapid rise which will continue for perhaps two or three years before the zenith is reached, and while there is room for men of sound judgment to produce machines commercially and at prices that are fair, it is also true that failure is inevitable among a large class of alleged manufacturers whose experimental days have yet to come and who with experience, to their bitter sorrow, the same difficulties and disappointments, sometimes ending in absolute ruin, through which the successful makers of today have passed at great expense of time, energy and money.

## Events of the Week

Long Island Automobile Club held second annual 100-mile endurance test.

Large number of competitors who raced over the course in defiance of the rules and laws to be disqualified.

Voigt, in a Panhard, rides 100 miles in 2h. 52m.

Manufacturers' association passes resolutions denouncing the racers.

Next Chicago show to be held at the Coliseum Feb. 14-21, 1903.

Newby Oval, Indianapolis, celebrated cycle track, to be leased for other purposes.

Baldwin automobile factory, at Connellsville, Pa., sold.

Darracq agency to be established in Chicago.

S. D. Proctor Smith will import French air ship.

Detroit and Cleveland newspapers arranging race between the two offices.

Report that Fournier will not return to America denied. Syracuse club still complains that A. A. A. dues are too high.

Chicago club committee investigating various courses for the 100-mile endurance run of June 12.

Serpollet drives steam carriage at rate of a mile and a quarter a minute.

Many successful speed trials in France.

Manufacturers' association elects twenty-six new members.

## AUTOMOBILES IN PUBLIC SERVICE

### Plans of People Who Will Buy Vehicles for Use on Stage Lines and in the Carriage of Freight

Three additional replies have been received to MOTOR AGE's intimation that it would be pleased to receive the names and addresses of makers who are prepared to deliver vehicles for stage lines and freight. One of these comes from the Tractor Truck Co., 1524 Chestnut street, Philadelphia, whose secretary writes: "We are makers of all kinds of heavy vehicles and would be glad to have you submit our name to any one in the market for stages, heavy trucks, all styles of delivery wagons, etc." Another is from the Davenport Mfg. Co., 617 Masonic Temple, Minneapolis, which gives details of an automobile stage which we expect to describe and illustrate in the near future. A third comes from William G. Clark, 33 Chester street, North Cambridge, Mass., to whose system reference has been made in this paper on more than one occasion.

The following remarks by one R. C. Mudge, reported by the New York Commercial, may or may not state the case properly in every detail, but are worthy of consideration by makers who are interested in the production of heavy vehicles:

"A German inventor has been experimenting on a new power for 15 years. It is now perfected. The power is generated in the expansion of gases produced from a low grade kerosene. Nothing is used but the kerosene and the motor. There will be no water or batteries. The motors will weigh about 4½ to 5 pounds per horsepower.

"The trucking proposition is the great thing. In London, where the auto-trucks are used, most of the city garbage is removed in steam wagons, and the city's sprinkling is done by auto-carts. The garbage trucks have a capacity of from 5 to 7 tons, and it costs \$7 to remove with one of the large trucks 140 tons of garbage in 12 hours.

"The prospective cost of the new power will not exceed 10 cents an hour a ton. A pleasure wagon, carrying two persons, will carry 40 miles with 5 cents expense, figuring on 5 cents a gallon for crude oil. The American capitalists who are interested in the invention paid \$600,000 in cash for all the American rights. In a recent test near New York a 250 horsepower engine, operated on the new system, produced a given power at an expense of 82½ per cent, less than was incurred in the most economical Corliss plant that could be equipped. The two plants were similar in capacity. The test lasted 5 days. The company has bought large quantities of Texas oil and steamers for transporting it, and will invest \$25,000,000 in America."

SAN BERNARDINO, CAL.—Samuel Joiner, a well-known merchant and mining man of the Dale camp, will have the dis-

tion of operating in regular service the first automobile on the great Colorado desert. Recently Joiner was awarded the contract for carrying the mail twice a week between Walters on the Southern Pacific railroad and the mining camp of Dale. The distance is 80 miles, and it is a 2 days' trip by wagon. Joiner has been in San Bernardino several days and left for Los Angeles for the purpose of purchasing a six-seated automobile.

CRIPPLE CREEK, COLO.—B. F. Rohrig intends looking into the matter of the Bayfield mobile line. The people of that section are to be waited upon, and if encouragement is given a line will go to Bayfield and vicinity. The line to Trimble has met with substantial encouragement. The Farmington line is almost assured, and Mr. Rohrig expects to close contracts for the machine. The machine will be made to order at a cost of about \$3,000. Seating capacity, 12; horsepower, 20.

DUNKIRK, IND.—The Dunkirk-Mobile Transit Co., which proposes to operate an automobile transfer line between here and Redkey, was incorporated recently with a capital of \$10,000.

OSHKOSH, WIS.—D. W. Fernandez and other capitalists are organizing an automobile line between the summer resorts on the lake shore. The company is to be incorporated for \$20,000. The line will extend 15 miles.

RICHLAND, MICH.—An automobile line or an electric road through the town is almost an assured thing.

KRAMER, IND.—The Indiana Springs Co., which owns Mud-lavia, has purchased from the Chicago Motor Vehicle Co. one of its nine passenger vehicles for transportation of its guests between Attica, the nearest railroad station, and its resort. It expects to install the service within a few days.

DURANGO, COLO.—David Day, editor of the Durango Democrat, is organizing a company with \$10,000 capital to operate a stage line 60 miles to Farmington, N. M.

MOUNT CLEMENS, MICH.—Diehl Brothers have purchased several automobiles and are about to start an automobile livery. The roads about here are in good condition and the business promises to be successful among the summer people.

LEWISTON, MONT.—J. R. Cook is having a gasoline vehicle built of twenty-four horse power to be used for transporting passengers and baggage between this city and railroad points. He expects to have it in operation by the end of May.

DENVER, COLO.—The opening of Denver's automobile stage line was signalized by a parade, which unfortunately occurred in a drenching rain. It was too important an event to be overlooked, however, and the band, which occupied the first of the five machines, called thousands to the sidewalks to take part in the celebration. The vehicles have since been used for regular trips through the most picturesque parts of the city.

CHILLICOTHE, O.—"It is a sure thing that we will have automobile cars running between Chillicothe and Bainbridge, via Bourneville, and Chillicothe and Clarksburg, via Yellow-bud, next summer," said B. A. Gramm. "We expect to make two trips a day to each of these two towns and will have a freight car that will make at least one trip a day."

DUNKIRK, N. Y.—A company has purchased several automobiles, each capable of carrying twenty-four persons. These will be operated to Fredonia and also to Hickoryhurst and Van Buren Point. It is said that W. J. Conners, of Buffalo, is back of this.

Suit has been commenced at Washington by the Metropolitan Railroad Co. against the Autocarette Co. for \$562.50 for rent said to be due. The plaintiff caused an attachment to be issued and took charge of the property of the autocarette company.

The Boston fire department will add another automobile fire engine to its equipment. The present machines of this class owned by the department have been used since 1897, and have demonstrated their superiority over the horse-drawn engines in every direction.



## SEVENTY-FIVE MILES AN HOUR

Serpollet's Steam Carriage Goes a Mile at that Rate and Shalters Drivers Nerve—Other Great Performances

PARIS, April 13.—After having been postponed three days the mile, as well as the Rothschild cup races, were run today. The first was for motor cycles and the time made shows that marked improvement is being made in that class of machine. The second for tri-cycles also shows what a remarkable turn of speed can be obtained from that class of machine and how the French idea of high power is being carried out even in the three wheeler. Osmont now holds all world's records, in partnership with Rigal, the latter, however, being more prominent in road work than on the track. The race for voiturettes brings out another fact, and that is that the 12-horsepower machine winning that event weighed but 840 pounds, a remarkably light weight for such a powerful car. For vehicles weighing up to 2,200 pounds, the Mercedes, a German vehicle, carried off all honors, the machines all being of high power.

The event of the day, however, was the kilometer race, in which all the prominent makes were entered, the winner being Serpollet, in the steam vehicle bearing his name, in the marvelous time of 29 4-5 seconds. As a kilometer is approximately  $\frac{2}{3}$  of a mile, the rate at which he was traveling exceeded one and a quarter miles per minute, a speed greater than that at which the fastest trains travel. The speed was such as to prevent the operators breathing, and as a consequence Serpollet and his friend came out of the ordeal pale and shaky, their nerves having been tried to their limit. Serpollet states that it is not only unsafe, but unpleasant to travel at such speed. He, however, went out the following day and won another notable contest, this time the kilometer being run from a standing start up a 9 per cent grade. The winners were as follows:

## MOTOR BICYCLES—ONE MILE, STANDING START.

Williams, 3 horse Clement ..... 1:12 1-5  
The former mile record belonged to Cissac, 1:48 3-5.

## TRICYCLES—50 TO 250 KILOS.

Osmont, 8 horse De Dion ..... 0:57 4-5  
Bardeau, 6 horse De Dion ..... 1:10 2-5  
This time is equal to the world's record, held by Rigal.

## VOITURETTES, 250 TO 400 KILOS.

Guillaume, 12 horse Darracq ..... 1:27 4-5

## LIGHT VEHICLES, FROM 400 TO 650 KILOS.

Baras, 20 horse Darracq ..... 1:10 4-5  
Renaux, 20 horse Darracq ..... 1:11 2-5  
Gabriel, 20 horse Darracq ..... 1:11 2-5  
Edmond, 20 horse Darracq ..... 1:21 4-5

## VEHICLES, 650 TO 1,000 KILOS.

Degrais, 40 horse Mercedes ..... 1:09 3-5  
Werner, 40 horse Mercedes ..... 1:09 4-5  
Lemaitre, 40 horse Mercedes ..... 1:17 2-5  
Rutishauser, 12 horse Serpollet ..... 1:21 2-5

## THE ROTHSCHILD CUP RACE

for two seated vehicles, occupied, weighing from 650 to 1,000 kilos. Holder of the cup for 1901, Serpollet, :35 4-5.

Serpollet, 20 horse Serpollet ..... 0:29 4-5  
Degrais, 40 horse Mercedes ..... 0:36 1-5  
De Caters, 40 horse Jenatz ..... 0:37 1-5  
Chaillaud, 12 horse Gardner-Serpollet ..... 0:38  
Stead, 40 horse Mercedes ..... 0:38 1-5  
Werner, 40 horse Mercedes ..... 0:38 3-5  
Chauchard, 40 horse Panhard ..... 0:38 4-5

The next three places were won by a Panhard, Serpollet and Mercedes respectively.

## Second Day's Race

## ONE KILOMETER, STANDING START, ON 9 PER CENT GRADE.

L. Serpollet, 20 horse Serpollet ..... 0:59 1-5  
Baras, 20 horse Darracq ..... 1:03 4-5  
Degrais, 40 horse Mercedes ..... 1:05 4-5  
Stead, 40 horse Mercedes ..... 1:07 2-5  
Wolf Bishop, 40 horse Mercedes ..... 1:08 4-5  
Gabriel, 20 horse Darracq ..... 1:10 2-5  
Adolph, 40 horse Panhard ..... 1:16 2-5  
Renaux, 20 horse Darracq ..... 1:17 4-5  
Osmont, 4 horse De Dion tricycle ..... 1:18 1-5

Of the four Mercedes machines which took part in the contest, the first one has been sold to Mr. Harmsworth, the owner of the London Daily Mail and Evening News, the second to David Wolf Bishop, of New York, who rode the machine in the races, the third to Prince Lu-becki, the fourth to Baron de Rothschild.

## Vanderbilt's New German Carriage

New York, April 26.—Tom Myers, who has recently returned from Europe, told Alfred Reeves some interesting bits of foreign news, which appear in the Mail and Express of yesterday. "I firmly believe that the 50 horsepower Mercedes carriage now being used by Vanderbilt in Europe is the fastest machine in the world," said Myers. "It is painted a royal blue, has a broad seat for two, with a rumble on the rear. There is no tonneau. It has the usual square bonnet in front. The wheels are about 36 inches and the carriage is built very low. It is not quite as large as the machine he used in this country. He is delighted with the new one, which, I am sure, can cover a mile in 47 seconds. You know he covered a kilometer in 28 seconds, which is equal to a mile in 47 seconds. David Wolfe Bishop has a carriage exactly like Vanderbilt's.

"Racing across the water is on the decline. Not that manufacturers and automobilists do not favor it, but there is too much difficulty in securing permission to speed over the roads. Although not officially abandoned, I do not think the Paris-Vienna race will take place, nor do I think the Paris-Bordeaux contest will materialize. The trouble is that one official can prevent a race. The clubs might secure permission from every mayor of the twenty or thirty towns included in the course, but the refusal of just one mayor kills any chance of a race."

E. D. Gallaher, of the Fournier-Searchmont Automobile Co., denied emphatically a story circulated in New York last week relative to Fournier's not returning to the country toward the end of June as originally announced.

The third ward campaign committee of Portland, Ore., offered those desiring to register a free ride to the courthouse in an automobile.

# STEEL RIMS

**CRESCENT AND  
DROP CENTER**

## SECTION

From  $1\frac{1}{4}$   
inches up  
to 4 inches

## DIAMETER

From 28  
inches up  
to 5 feet

**THE AUTOMOBILE AND CYCLE PARTS CO.  
SMITH STAMPINGS FACTORY  
MILWAUKEE, WIS.**

## New Kelly Generator ...

**For Steam Vehicles  
Improved—Perfect in Every Way**



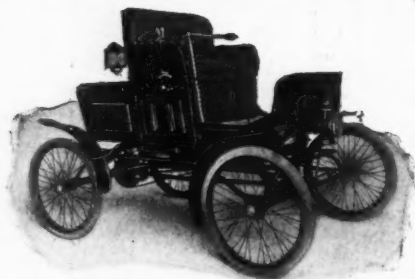
Drip cup unnecessary in starting—Aluminum case over generator—All connections on the outside—Strongly made—Easily adjusted—No flaring or flashing in lighting, even in strong wind. A quick and powerful generator—Main fire valve controlled at seat—Small and neat in appearance and adapted for any machine.

Our new One-Piece Cast Burners have been greatly improved both in power and strength. No wedged tubes in its construction. All in one piece and easily cleaned.

**Address, KELLY HANDLE BAR CO., Cleveland, O., U. S. A.**



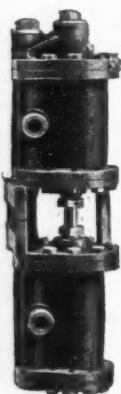
## The Victor Steam Carriage



**RELIABLE AUTOMATIC FEATURES.  
CORRECT MECHANICAL PRINCIPLES.**

Write for full technical description.  
Agents wanted everywhere.

## The Victor Steam Pumps



Size, 9 in. x 3 in.; weight, 4½ lbs.  
Capacity of Air Pump, 80 lbs. pressure on tanks or tires.

Capacity of Water Pump, 3 gallons per minute against 200 lbs. boiler pressure.

**PRICE, \$30.00 EACH.**

These pumps have been adopted by the Locomobile Co., the Mobile Co., and other leading manufacturers of steam carriages.

## The Victor Grade - Meter



The grade is shown by the location of a bronze ball running in a graduated concave tube filled with spirits.

**PRICE, \$1.25, POSTPAID.**

**OVERMAN AUTOMOBILE CO.**

7 East 42d Street, New York.

## PROTECT YOUR OWN INTERESTS

and increase your business by selling that which pleases your customers and nets you a good profit. In the

## CUSHION FRAME

makers and dealers alike have found a trade stimulant, and by continuing to advocate this popular device they will protect themselves against loss of patronage and profits.

## We Protect the Trade Against Price-Cutting

You know that the reducing of prices of standard equipments has hurt the cycle trade. If you advocate the Cushion Frame you protect your own interests.

## HYGIENIC WHEEL CO.

St. Paul Bldg., New York

HOME OFFICE: Philadelphia

## CHICAGO SHOW OF 1903

To Be Held at the Coliseum February 14 to 21—Makers' Association Discusses Guarantees and Other Matters

New York, April 28.—There was a conference at the offices of the National Association of Automobile Manufacturers today between the directors of the association and Mr. Miles, of Chicago, relative to the next Chicago show. After the meeting it was learned that the association had given its sanction and that the show will be held at the Coliseum under Mr. Miles' management from February 14 to 21. It was the desire of the Chicago people to have the show ahead of that at New York, so that in the event of the demand exceeding the supply, as at present prevails, western dealers might be given a chance to obtain assurances of supplies at a reasonably early date. The contract with the Madison Square Garden Co., however, provides for a date which would have made it necessary to hold the Chicago show in December, which was considered too early.

The question of a standard guarantee was taken up by the directors and Mr. Leonard presented the one used in France. A long letter from Mr. Duryea, on the subject, was read. Finally the secretary was instructed to ask all makers in the association for copies of their present guarantees so that, from the whole, all the good ideas may be extracted. Prominent dealers are to be asked whether they will co-operate with the association in charging for instruction of customers. The growing demand for lessons for every member of a buyer's family renders this action necessary.

Revision of the constitution and the incorporation of the association were other matters considered. Both were referred to committees.

Finally the directors placed the association on record in the matter of the racing indulged in during the Long Island club's test. (For details of resolution see page 11.—Ed.)

## New York News Letter

New York, April 27.—New York Athletic Club motor vehiclists, by the success of the recent run of the automobile division to Travers Island, have convinced the governors of the club of the advisability of erecting a storage shed at their summer home. It will be 150 feet long by 75 feet wide and have numerous entrance and exit doors. At one end of it will be a charging plant, a repair shop and a supply room. There will be storage space for about sixty vehicles, of which there are over two hundred owned by members.

The White Ghost is receiving a new coat of paint at the Durracq station before being shipped to John A. Drake at Chicago.

Henry Rogers Winthrop, a member of the A. C. A. law committee, was arrested for excessive speeding on Thursday and will be tried before a magistrate tomorrow. Mr. Winthrop claims that after being warned he took out his watch and timed himself between telegraph

poles and that this indicated a gait under the 8-mile limit.

R. J. Allyn, of the Allyn House, Hartford, recently bought a 16 horsepower Darracq. He drove it home himself one day last week and covered the distance comfortably in less than a day's run. Mr. Allyn left this city at 9:30 a. m. and reached Hartford in time for dinner in the evening.

For the purpose of giving the aldermen, who now have a new speed ordinance under consideration, an object lesson the A. C. A. contemplates giving in the near future a series of brake tests along the line of the recent stopping trials in England.

A. G. Evans has been elected president of the Hudson County Automobile Club. Other officers elected at the annual meeting on Monday were Dr. L. Bauman, vice-president; Frank Eveland, secretary-treasurer, and G. H. Wilson, George E. Blakeslee, E. V. Kiersted and Dr. L. A. Opdyke to the runs and tours committee.

## Race Between Detroit and Cleveland

Toledo, O., April 28.—The conditions look very favorable for a race between the chauffeurs of Ohio and Michigan about the middle of June. The promoters are the Free Press of Detroit and the Plain Dealer of Cleveland, who will put up a \$500 prize cup for the winner.

One of the conditions is that all Ohio automobilists shall report at the office of the Plain Dealer on the day of the race, and all Michigan autos to be entered to report at the Free Press office at Detroit. It is confidently expected there will be close to 100 entries for the event, and among these will be two or three from Toledo.

The race will be run between the offices of the two newspapers, the Ohio men leaving the Plain Dealer establishment in Cleveland for Detroit, and the Michigan crowd starting for Cleveland from the Free Press office. The start will be made simultaneously from both points and the carriage arriving at either point first will receive the prize. Prizes will also be given to the second and third in arriving. The trip will be over comparatively good roads and will cover about 190 miles.

## Electric Ambulances for New York

Several large gifts have been made to the Mount Sinai Hospital to establish and maintain an electric ambulance service. Murry Guggenheim, one of the directors, has given the largest sum, which is \$20,000. The income of this is the nucleus of a permanent fund to be used when the hospital moves into its new building at One Hundredth and One Hundredth and First streets, between Fifth and Madison avenues. Henry R. Ickelheimer has given an ambulance to the hospital and Jefferson Seligman has signified his intention to pay for the maintenance of an ambulance as long as the hospital remains in its old quarters.

A. L. Dyke, the St. Louis jobber of automobile equipments and parts, has moved to larger quarters at 1402 Pine street, where commodious show rooms have been fitted up. A complete line of everything pertaining to automobiles will be carried in stock.

# Matters of Commercial Interest

## KNOWN AS THE CLEVELAND

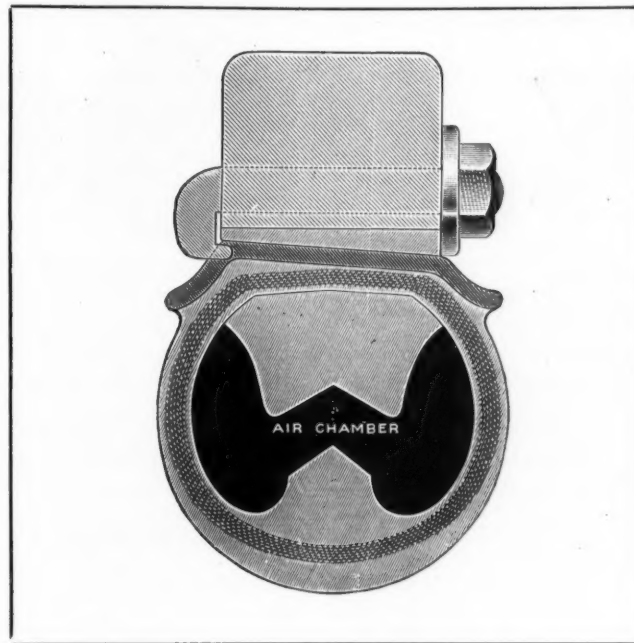
### The Hansen Company Now Ready with Its Gasoline Carriage—Its Construction

Cleveland, O., April 28.—The Hansen Automobile Co. is prepared to make deliveries on the hydrocarbon vehicle here illustrated. It weighs between 800 and 900 pounds, according to equipment. The motor is of the four cycle, single cylinder type, fitted with a variable jump spark and throttle speed-changing device, developing 6 horsepower at 940 revolutions. The water is circulated by a centrifugal pump. In the water supply tank is a small tank of lubricating oil which is automatically fed to all parts. Except the wheel bearings, which are packed with lubricant, no part of the machine requires attention in the matter of oiling. The transmission is an adaption of the sun and planet principle with two speeds forward and one reverse change of speed. Power is transmitted to the rear axle

direct by Diamond roller chain, No. 155. The entire mechanism is suspended from a steel frame which, in turn, rests on rear elliptic springs fastened to pivots and radius rods to keep the chain always in proper tension. The springs in front are of the compound platform type. The front axle is fitted with American Ball Bearing Co.'s steering knuckles. The rear axle is fitted with spur equalizing gear. The muffler, sufficiently large to relieve back pressure, can be cut out at will. As standard, the vehicle is fitted with wire wheels, hubs turned from solid bar; rims electrically welded, spokes swedged and nicked. The Archibald type of artillery wheel is furnished at a higher figure. With the artillery wheel G & J clincher tires are used. The wheel base is 56x72. The body is of wood and eight coats are used from first to last. Side steering device is used, levers nicked except when otherwise ordered. Engine and transmission bearings are of phosphor bronze. The Hansen company is purchasing new machinery and will



THE HANSEN COMPANY'S CLEVELAND CARRIAGE.



NOT A SINGLE  
**MUNGER TIRE**

went wrong or gave one  
iota of trouble in the

**100 MILE RUN**

of the Long Island Automobile Club last Saturday. :: The use of Munger Tires is a never-failing guarantee against the necessity of stops due to tire troubles. If the cut does not explain perfectly we shall be glad to send catalogue. Insist on the best—THE MUNGER

**MUNGER**  
**AUTOMOBILE TIRE CO.**  
TRENTON, N. J.



## CORRECT COSTUMES FOR AUTOMOBILISTS



REGULATION CAP.



GAUNTLET.



GAUNTLET IN USE.

**Regulation Auto Caps.** Only correct style adopted by the leading chauffeurs in the U. S. "Furnished in waterproof" auto silk for summer wear—as light as a feather. Also of Mexican kid.

**Automobile Gauntlet.** Our Gauntlets embrace new ideas. Fit closely around wrists, exclude dust, rain and cold, protect the coat sleeves, and have a stylish appearance. Made from Mexican kid leather, in black and tan.



**NORFOLK  
AUTO JACKET**

Made from  
Mexican Kid.  
The handsom-  
est thing ever  
attempted in  
leather.

**IF YOU DO NOT KNOW** where to procure  
these goods, write to us for information. We  
make goods of the Highest Grade Only.

**DEMNERLE & CO.,**  
248 West 23d Street, NEW YORK

## AGAIN IN THE LEAD THE HAYNES-APPERSON CO.

*Jamaica, N. Y., April 26, 1902.*

*C. H. HAYNES,*

*KOKOMO, INDIANA.*

*Runabout and Standard Phaeton showed perfect  
records. Surrey ran 99 miles without a stop.*

*ELWOOD HAYNES.*



Telegram received Saturday, April 26th, at the close of the Long Island Endurance Test of 100 miles without a stop. ♦ ♦ The above are stock machines which we had recently sent to customers living in the vicinity of Long Island

♦ ♦ Write for Catalogue describing our Two and Four-Passenger Machines ♦ ♦

**The Haynes-Apperson Co., Kokomo, Indiana**



shortly be able to produce a very considerable output. Fifty vehicles of the pattern described are being built for the Cleveland Automobile & Supply Co., agent for the company. The first sample has been delivered. The vehicle is known as the Cleveland.

#### THE TRADE OF HARTFORD

##### One Hundred and Fifty Machines Owned There—Stations, Stores and Makers Busy

Hartford, Conn., April 28.—Blessed with fine, well-paved streets, this city is becoming one of the liveliest automobile centers in New England. There are at present about one hundred and fifty machines owned here, and this number is being added to daily. One of the latest additions is a 9 horsepower Darracq tonneau, purchased by Robert J. Allyn, proprietor of the well-known hostelry bearing his name. There are three automobile stations, all started within the last year, and all of them are making additions to their facilities to keep up with the increasing demand for space.

The Hartford Automobile Station, owned by L. D. Fisk, has taken two buildings adjoining the present quarters on Wells street, which, when completed, will be one of the biggest establishments of its kind in the state. The Park Central stable, owned by W. Tewksbury, which was started at 402 Allyn street a few months ago, has grown from a small store into an establishment taking in three stores, and in a few days Mr. Tewksbury will take the remaining store in the building occupied by him and add it to his plant. This station is distinctive from the fact that only electric vehicles are taken in storage. It is completely equipped for vehicles of this type and employs expert electricians. Mr. Tewksbury is the owner of the Allyn House electric stage, which plys between the depot and the hotel, and is operated by William Dayhill, a chauffeur who takes the utmost pride in his vehicle. The bus was built by the Electric Vehicle Co., of this city, and since it started last November has never missed a trip. It is fitted with Turner tires, which are apparently as good today as when they were made.

S. A. Miner is the proprietor of the last station started. He is located at 304 Allyn street and is building up a business of automobile livery, renting machines to traveling salesmen and others desiring rapid locomotion around the city. It may be added that Mr. Miner insists on sending his own operators on vehicles loaned by him.

Brown, Thomson & Co., the big dry goods house, whose automobile department is managed by W. L. Ledger, is enjoying a bid demand for the Knoxmobile. "I have people waiting for all the machines I can get between now and the end of June," Mr. Ledger said to a MOTOR AGE representative. The firm is also agent for the Oldsmobile and the White, and is meeting with a corresponding demand for these vehicles. In the basement of the big building occupied by the firm is a complete repair shop equipped with facilities for everything, including the vulcanizing of every size of tire.

During the past week the Electric Vehicle Co. has sold eight of the Columbia extension broughams. These

vehicles carry five passengers beside the operator, and have underslung batteries.

In a few weeks a device which will interest the owners of fast machines will be introduced to the automobile world by the Veeder Mfg. Co. It is a speedometer, which accurately registers the exact speed at which the vehicle to which it is fitted is traveling. The device was shown in operation to the MOTOR AGE man by Mr. Post, who is not yet ready to make public the details of its construction. The fact that the firm has been working on this appliance for the past year and that two of them have been in operation on Mr. Post's steam wagon for some months without showing any deviation from accurate registration would indicate that the firm has an article which will eventually prove as successful a production as the well known Veeder cyclo-meters and odometers.

The Whitney Mfg. Co. is rapidly extending its trade in automobile chains and is shipping many big lots abroad. In a number of recent tests the Whitney chain demonstrated its superior wearing qualities and sustained the manufacturer's claims as to the quality of the material and workmanship which enter into its construction.

The Hartford Rubber Works is running nights. "The great difficulty we are meeting," said Burton Parker to the MOTOR AGE man, "is that we cannot get men enough."

These facts all go to show that Hartford is proving an important factor in the production and sale of the automobile and its parts.

#### BEWARE UNKNOWN FOREIGNERS

##### European Makers of Small Repute Will Try to Sell Their Goods in America

New York, April 21.—The demand for foreign machines will undoubtedly lead to the flooding of the American market with many poor European makes," said a visitor to the MOTOR AGE office last week. "There seems to be a general impression," he continued, "that any foreign machine is good, and taking advantage of this belief makers on the other side who are not selling many machines among the people who are acquainted with their defects are preparing to send their products to this country. There are several foreign machines that are excellent, just as there are excellent American machines, but there are also many that are not as good as the poor American makes, and a prospective buyer of an imported wagon should make diligent inquiry as to how that machine stands on the other side before making the purchase."

#### WOODRUFF MAY MOVE

##### Reorganization Plans May Mean Desertion of Old Factory—Other Cleveland Notes

Cleveland, April 28.—The Woodruff Automobile Co., which was organized some time ago and which finally removed to Akron, has been incorporated with \$50,000 capital stock by J. W. Curtis, Samuel B. Newman, F. A. Follin, E. J. Rosecranes and M. A. Watterson. The

company occupied the plant in Akron formerly owned by the National American Cycle Co., where it built a number of machines. It is understood that a reorganization has taken place, that Cleveland people have been interested, and that the business will be moved back to this city. The Woodruff vehicle is of the hydro-carbon type, small and light, and can be built to sell at a moderate figure.

The Weller Engineering Co., of Elyria, O., has completed an experimental vehicle which has proven successful. Orders for a number of vehicles have been secured and the company is figuring in engaging in the business on quite an extensive scale.

J. W. Miller, of Trail, O., has removed to Orrville, where he will be at the head of an automobile manufacturing company, in which H. M. Bechtel, S. P. Eshelman, S. M. Breuneman and others are interested. Mr. Miller has constructed a hydro-carbon vehicle which has proven a success. Tools and material for the work of building vehicles have been ordered.

#### NEW PEOPLE IN INDIANAPOLIS

**Company Organizing to Make Automobile Parts—Another Will Make Wicker Work**

INDIANAPOLIS, IND., April 28.—During a hurried run around the trade your correspondent found the Woodward Burner Co. extremely busy and a long way behind orders, due to the rush which has occurred since the show. Mr. Woodward is making preparations to



The Century Factory.

erect a new building. The Rattan Novelty Co. is making hampers for the automobile trade and expects to make other features, such as rattan seats. This company also will move into a new building. The Lindsay Automobile Parts Co. is about to organize, with a capital of \$100,000, to make parts for electric vehicles. Mr. Lindsay was formerly of the Lindsay Mfg. Co., of La Fayette, where he made bicycles for a

number of years. Fred Patee will have the management of the sales department.

#### THE OLD AND THE NEW CENTURY

**Company Finds the Bevel Gear Transmission An Attractive Feature**

The factory of the Century Motor Vehicle Company, at Syracuse, adjoins one in which some of the principals once held forth in another line of business. It was the home of the Barnes Cycle Co.

The snowbanks in front of the new factory of the Century Motor Vehicle Co. do not indicate that the managers have "cold feet." The building shown in the distance was the home of the Barnes Cycle Co. before it sold to the A. B. C., and the president of the Century company, C. F. Saul, and the engineer and manager, William Van Wagoner, were with the Barnes company in similar relations. The Century company was among the first to perceive that success in the automobile business was not to be gained by working along the lines of cheapness. It started to build a substantial machine, and has been successful. The distinctive feature of the Century is the bevel gear transmission, and the company finds it an attractive feature, especially to expert mechanics. It has followed its own designs in mounting the gears, and, starting with this feature, the plan and style of the under frame, or running gear, the location and connection of the motor, the controlling device, the brake, the reversing, etc., have naturally resulted in something different from other steam carriages. A booklet discusses the case of "Bevel Gear vs. Chain" succinctly. The Century company is now working on ideas of its own as to how automobiles should be sold and what should be done for the purchasers, which sounds extravagant, but which, it claims, is resulting profitably. The proposition is interesting reading. The view of the Century and the old chaise is interesting, as the latter is just a century old, dating from 1801.

#### ADAMS EXPRESS CO.'S WAGON

**After Long Experiment a Vehicle Has Been Found Satisfactory—Details of Changes**

The Adams Express Co. has, since 1898, experimented with self-propelled vehicles with a view to their adoption. It found that successful self-propelled vehicles would have to be designed to meet special requirements. Accordingly, its engineer developed a special design which, in actual service, proved very satisfactory. This design was fully illustrated and described in *MOTOR AGE* some months ago. It was found that though the essential features proved to be free from criticism, minor parts could be improved, and the company has perfected a design of a light and a heavy wagon of which the following are characteristic improvements on the former pattern. Many of these appear in the model just completed:

Instead of conical, dished wheels which have heretofore

# THE ORIENT RUNABOUT

A  
THOROUGHLY  
PRACTICAL  
CARRIAGE  
For every day use

WRITE FOR  
CATALOGUE

AGENTS WANTED  
In all parts of the United States



Model 1902. Price, \$875.00.

WALTHAM MFG. CO., WALTHAM, MASS.

FIRST  
IN  
HEAVY VEHICLE  
CLASS  
TO FINISH  
100-MILE  
ENDURANCE  
CONTEST

## THE WHEEL WITHIN WHEEL

### POSITIVE PNEUMATIC EFFICIENCY

PRACTICAL

MECHANICAL

SIMPLE

STRONG

RESILIENT  
(Rebounding)

SPEEDY

Patented in all countries. U. S. Patent 672,908.  
Others allowed and pending. Patent protected  
by the Patent Title and Guarantee Co. :: :: ::

THE WHEEL WITHIN WHEEL CO.

PARK ROW BUILDING, - NEW YORK

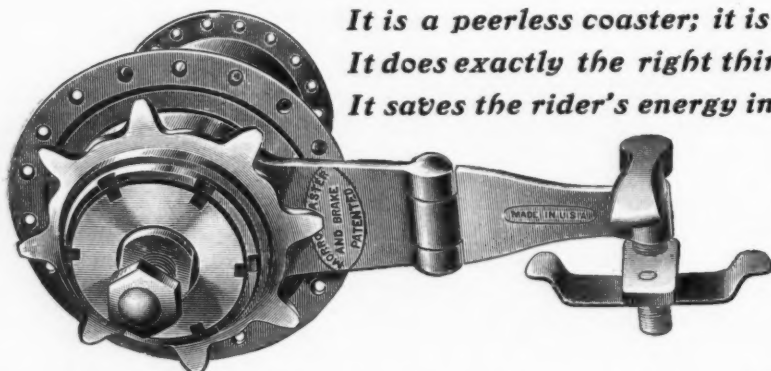
# THE SUPERIORITY OF THE MORROW

*Rests Not in One Feature, But in the Complete Whole.*

*It is a peerless coaster; it is a peerless brake.*

*It does exactly the right thing in exactly the right way.*

*It saves the rider's energy in coasting or in braking.*



As a brake it takes hold quickly but not violently; the slightest application retards the wheel's momentum and once applied, it does not require hard and continuous and energy-consuming back-peddalling pressure to keep it applied. It does not depend

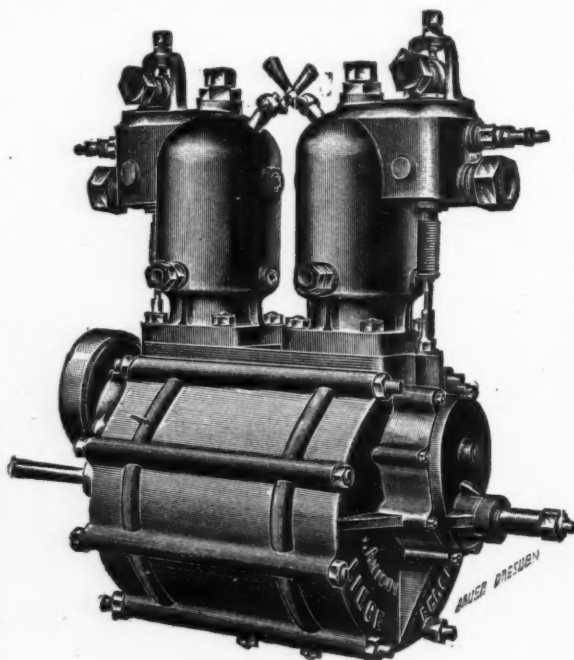
on the heat generated by the friction of metal against metal for its effective operation.

**The Morrow**

is the result not of a few months' limited experience but of several years' use in all parts of the world by all kinds and conditions of men. It is no experiment.

## ECLIPSE MANUFACTURING CO.,

ELMIRA, NEW YORK.



## AN AUTOMOTOR

Fitted with a

### 5 Horse Single Cylinder Engine

covered the 100 miles endurance contest of the L. I. A. C. in 6 hours and 20 minutes, with no stop, using 3 gallons and 12 gills of gasoline. Weight of carriage 820 pounds, carrying two passengers.

Kelcom Motors (Imported) water cooled:

5 and 7 Horse, Single Cylinder.

9 and 11 Horse, Double Cylinder.

Send for catalogue.

**A. H. FUNKE,**

101 Duane St., N. Y.

Immediate deliveries.



fore been considered desirable, cylindrical wheels are used, equipped with either rubber or wooden tires; the latter kind now being in experimental use.

An arrangement of upright L-iron guides on each side of the forward part of the wagon, in which the front axle is guided, gives great elasticity, and the springs, resting on the axle, are held down by the weight of the wagon body and load. This allows the suppression of the perch or underframe, which latter was of considerable weight and was found to have been inconvenient. The transmission of the tractive resistance is now taken up by the body of the wagon through the agency of the radius rods, linked to the steel frame of the wagon. The power transmission gear has never been changed and has always given perfect satisfaction.

A device for automatically locking the hind wheels is introduced. This can be so attached that it will automatically lock the compensating gear when the wagon is brought to rest suddenly, and it can also be used as an auxiliary brake for the wagon. With this arrangement it is impossible to break any parts of construction should the driver accidentally forget to unlock the device before rounding the next corner.

Round tanks are now used, as it was found difficult to keep square tanks from leaking. A feed pump, made to vary its output at the will of the operator, is a special feature of this design; it is driven at a reduced speed. A steam lifter is employed to fill the tanks. Great advancement has been made in the manœuvring quality of the wagon, as the controlling organs are well within reach of the operator and the steering has been simplified by a worm and quadrant arrangement.

In the boiler design the front smokestack, which obstructed the view of the operator, is now disposed of by a patented arrangement of side flues. It is further intended to remove these side flues and use compressed air in the furnace. All gears are encased, and the construction of all the moving parts is such that the possibility of annoyance on the road due to loosened

parts no longer exists. Cast steel enters freely into the construction, and the wagon presents a very light appearance, although the company's engineer is opposed to lightness of construction, feeling convinced that an error is more easily made in an effort to reduce weight than in making it liberal.

The feature of suspension of the driving pinions, which has been fully illustrated and described in previous issues, is the engaging of the wagon springs with them every time the wagon is started or stopped. The advantage of this feature is plain to any one who watches this wagon start, as for smoothness the starting reminds one of the winding of a clock.

The engine is of the compound type; 15 horsepower and 20 horsepower in the two sizes of trucks. It has a converting valve, and the reversing is effected by means of a sliding sleeve. The boiler carries 200 lbs. pressure and has all the customary fittings. Especial care was taken to take up as little space as possible with the machinery and the operator, with the result that also in this connection the wagon can be called an improvement.

A MOTOR AGE man saw Fred Warner, the writer of the above article, and Arthur Herschman, designer of the Adams Express Co.'s vehicle, who kindly supplied the description and drawings published some months ago in this paper. They stated that a new vehicle will be completed in about ten days, and that it will be of the type to be finally adopted by the company. It is at present in an uptown establishment and will be photographed for MOTOR AGE as soon as finished.

#### VOIGT GOES TO PARIS

But First Witnesses Trial of C. G. V. Carriage Made in America

While in New York attending the run of the Long Island club last Saturday Emile Voigt told of the first trial of the first 15 horsepower machine of the C. G. V. pattern turned out at Rome, N. Y. It occurred on the road covered by the contestants in last season's endur-



THE OLD CENTURY AND THE NEW.

ance run between Albany and Rome, except that it continued on past Herkimer to Utica and thence northward to Rome. The distance covered was about 125 miles. C. Joiner, of the Charron, Girardot & Voigt Parisian factory, drove the vehicle, and with him was Arthur Whyte, of the Rome Locomotive Works, where the company's machines are being built. The route lay through Amsterdam, over the difficult Tribes Hill, by way of Fonda, St. Johnsville and Little Falls, to Utica and Rome. Notwithstanding the disadvantages the route was covered in little more than 7 hours, and at the finish a careful examination showed a loosened bolt and a mud covered body to be the only ill effects of the test.

Mr. Voigt will sail for France in a few days, but expects to spend about 4 months of each year in this country.

#### Latest in Automobile Costumes

New York, April 26.—"Here is the latest in ladies' automobile costumes," said Mr. Mendleson, of Demmerle & Co., of 248 West Twenty-third street, to a MOTOR AGE man today. He exhibited a three-quarter length coat of fine French kid lined with silk. It had a high collar and full wide sleeves, and was undoubtedly a fine piece of work. The coat is intended for summer wear, being light and waterproof. This firm has just been granted patents covering the automobile gauntlet generally in use. Enthusiastic automobilists who are seeking serviceable costumes will be interested in the firm's circulars describing complete outfits.



#### Darracq Agency for Chicago

General Manager Chas. Cook, of the American Darracq Automobile Co., received word last week that at the recent 55 kilometer race, held at Nice during the week of April 7, five Darracqs finished in the first five positions among fifteen entries. F. A. La Roche has taken charge of the sales department of the Darracq company. Mr. Cook says he is receiving six vehicles a week. One of the latest received is a Limousine vehicle which has the same pattern 9 horsepower engine and running gear as the regular vehicle, but is fitted with a body suitable for city work. Mr. Cook will visit Chicago next week to establish a western agency.

#### Highwayman Which Holds up Sixteen

New York, April 27.—Smith & Mabley's imported 12 horsepower, 5,000 pound Panhard gasoline coach, to be

known as "The Highwayman," was given a trial trip this week. It has a capacity of sixteen persons and the hosts and guests numbered ten. It is said that Winthrop E. Scarritt, G. F. Chamberlain and J. M. Hill, of the A. C. A., are interested in a company which intends to purchase it and run it on daily excursions from the Waldorf-Astoria to Manhattan Beach and other suburban points. It is understood that the price asked is \$8,000. A satisfactory performance marked the trial trip, which was up Fifth avenue and through Central Park to the Casino.

#### Morgan's Heavy Steam Wagons

Toledo, O., April 28.—R. L. Morgan, consulting engineer for the International Motor Car Co., and also general manager of the Morgan Motor Co., has shipped from the Toledo factory the six steam trucks which have been constructed by him, and will be forwarded to the Morgan factory in Worcester, Mass. Under an arrangement which he made with the International Motor Car Co. last winter Morgan acquired all the steam trucks which were in course of construction at that time, and he will hereafter build that style of motor wagon in Worcester. Morgan has taken east with him twelve men from the Toledo factory, and will not be in Toledo again, except as his duties as consulting engineer for the International people call him here.

#### New Incorporations and Enterprises

DES MOINES, IOWA.—The Des Moines Automobile Co. has commenced work on its new factory on Ninth street.

CHICAGO, ILL.—Auto Rapid Transit Co.; to manufacture and operate motor vehicles; capital stock, \$50,000; incorporators, Louis A. Boening, Frank C. Roundy and John McFadden.

AKRON, O.—P. J. Chandler, a machinist residing at 204 Buckeye street, has been constructing a steam automobile which he expects to have complete in a very short time.

AMSTERDAM, N. Y.—The Amsterdam Automobile Co. has been incorporated to manufacture and sell motors, engines and machinery. The capital stock is \$25,000, and the directors for the first year are: George I. Herrick, Wilburn Carpenter, Henry C. Grieme, Cornelius Van Buren, Timothy H. Pettingill, P. Henry Smeallie and George B. Smeallie, of Amsterdam.

YORK, PA.—S. S. Morton and sons, Walter and Robert, of the firm of Morton & Co., have associated themselves with Frank Fields and several other New York capitalists, and will form a stock company for the manufacture of gasoline traction engines on a very large scale. The new company will be chartered and capitalized at \$100,000. Mr. Morton has successfully demonstrated to the New York capitalists that he has the "real thing." Several days ago a test was made of a 9-horsepower engine, to which a big threshing machine was hitched. The company is doing business in the name of the Morton Gasoline Traction Co., the factory being at York, Pa., with main office in New York. It expects soon to turn out auto trucks for heavy trucking, the only successful one on the market, which is not too heavy to be practical and that can be sold at a price within the reach of the common user.

RICHMOND, IND.—Articles of incorporation were filed today by the Brown-Darnell Co., of Richmond, Ind. The capital stock is \$2,000, and the declared purposes are to make and sell automobiles, bicycles, etc. The directors are Wesley Brown, John A. Spekenhier, John A. Walls, Fred M. Taft, Edward Valentine and John C. Darnell.

# A Record for American Cars.

**First Two American Cars and  
First Two Four-Passenger Cars  
to Finish in the Long Island  
Endurance Contest.**

We entered three cars, two being our latest model Tonneau, carrying four persons, and one being our regular Touring Car, carrying two persons. All finished the entire run of One Hundred Miles without a stop (except to repair one punctured tire, not penalized under the rules). Our cars were too fast to conform to the speed limit of the contest, **ALL FINISHING AHEAD OF TIME.** The two Tonneaus were the **FIRST AMERICAN CARS** and the **FIRST FOUR-PASSENGER CARS TO FINISH**, notwithstanding the fact that one of them **STOPPED TWENTY-NINE MINUTES TO REPAIR A TIRE.** One Tonneau averaged better than twenty miles an hour, breaking the record of American cars over the course, the other better than nineteen miles an hour, while the Touring Car, the **FOURTH** American car to finish, averaged about eighteen miles an hour. The only cars to finish ahead of ours were high powered French racing cars with rear seats removed, carrying only two persons. :: :: :: :: ::  
In exchange for your name we will send you much fuller description of the contest and our illustrated catalog. :: :: ::

**Fournier-Searchmont  
Automobile Company**

1238 Orkney St. Philadelphia.

Agencies: John Wanamaker, New York, Philadelphia,  
Githens Bros., Chicago.

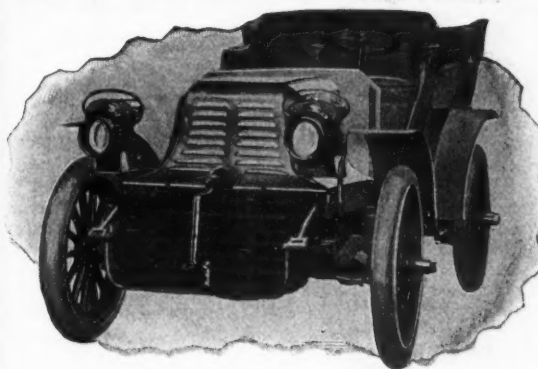


## National Electric Vehicles

Require less attention than other automobiles. Easily managed by man, woman or child. No noise, nothing unpleasant about them. Thoroughly reliable, practical for business or pleasure. Any speed desired up to 16 miles an hour. Graceful lines. If this style does not attract you, we have others that will.

Write for illustrated catalogue which tells all.  
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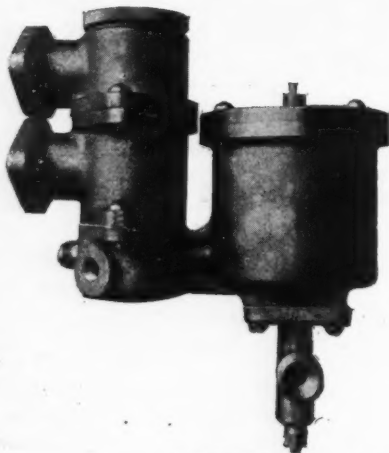
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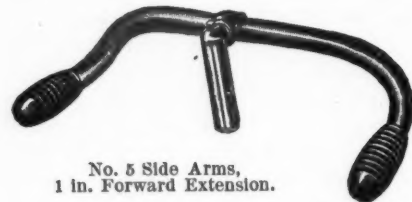
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# THE CYCLE AGE

At the second big meeting of the season at the Princess track, on April 13, the principal race was the 50 kilometers (31½ miles) paced race between Tom

Linton, Edouard Taylor, Robl, Dickentmann and de Guichard. Owing to the complete failure of all of his tandems Robl was practically out of the race 10 minutes after it had started. After having left the track for a few minutes, while crying like a child, the world's champion came back and finished the course. Dickentmann won by several laps from Taylor in 46:36 1-5. Linton, who had no pacemakers, was last. Jacquelin, after being unsuccessful in an attempt to break the kilometer (¼ mile) flying start record, covered the kilometer, standing start, in 1:12-5, breaking the former record by 2-4-5 seconds.

The match between Chase and Bouhours at the new Buffalo track was expected to be interesting, but the Englishman, who had had a severe tumble during the week, felt the effects of the fall and had trouble with his pacing machines. During the first part of the event Bouhours lost several laps owing to some bad pickups, but made up the distance while his opponent was in trouble. The French champion finally won by a lap in 47:32. More interesting was the scratch race, in the final of which Rutt, the German, easily disposed of Heller and Breyc.

Rigal, the French tricycle record holder, was badly injured while riding his machine on the Buffalo track on April 14. The turns being short he was not able to take them while riding at a 50-mile speed, and in taking one of the turns his machine slipped and he was thrown and slid about 50 meters.

## WANT A RECORD ATTENDANCE

Metropole Club has Another Good Scheme to Interest the Public in Cycling

New York, April 27.—That organization of veteran cyclists, formed to revive bicycling publicity and interest, the Metropole Cycling Club, in addition to running a coasting contest on May 10 and a motor bicycle endurance run from Boston to New York on July 4, now has in contemplation a monster race meet at Manhattan Beach in June. Manufacturers and dealers have agreed to buy tickets by the thousand at nominal rates mainly for distribution, that the greatest crowd in the history of cycle racing hereabouts may be gathered and

that the public may see that cycling is not dead. No profit will be sought and the gross receipts will be expended on the meet.

## No Racing at Indianapolis

The Indianapolis Cycle Track Co. will abandon racing this season. The company will in all probability lease the Newby oval track. There have been two propositions made for the track, one from a man who proposes to attempt a revival of the interest in the cycle racing and the other who desires to use the oval for vaudeville attractions, placing it in a vaudeville circuit and giving summer amusement.

A. C. Newby, president of the company, will return shortly, when some definite decision will be made as to the disposition of the oval. Herbert Foltz, who has been so long identified with racing, has determined to abandon it, as his business interests are such as to demand his entire attention.

## Cycle Club Activity

HAZELTON, PA.—The Associated Wheelmen of this vicinity have reorganized and the following officers elected: President, C. W. Kline; vice-president, W. H. Hertz; treasurer, J. B. Price; secretary, J. R. Sharpless. Subscriptions will be received toward repairing the North Side track.

WASHINGTON, PA.—An organization is being effected here by prominent business men, to be known as the Washington Automobile Co., with \$100,000 capital. The promoters are Charles A. Wales, president of the Beaver Refining Co.; James E. Duncan, C. A. Braden, John A. Howden and C. E. Shutters, of Washington, and Louis Langan, of New York, who controls patents which it is intended to use.

ALBANY, N. Y.—A bicycle club has been organized by members of the Modern Woodmen with the following officers: Captain, J. H. Creble; lieutenants, J. E. Brown and J. T. Chapman; color bearers, W. Cunningham and E. Steinbeck; bugler, J. J. Gallup. The officers were instructed to arrange for a series of runs during the summer months, the objective point of each run being the meeting place of a camp of the order.

BROOKLYN, N. Y.—Over 200 cyclists, representing all of the clubs in the Associated Cycling Clubs of Long Island, took part in a beefsteak dinner, the occasion being the celebration of a bowling tournament recently conducted by that organization.

BROOKLYN, N. Y.—The racing committee of the Kings County Wheelmen has secured Fred Warner, who has shown great speed, as a member. The club's sextet will be seen at Manhattan Beach this summer, manned by a K. C. W. crew, ready to meet all comers.

BALTIMORE, MD.—A greater number of cyclists may now be seen on the streets than at any time within the last three years. The park officials report that the number of female riders has been unusually large this season. The Century Cycling Club will run to Washington on April 27.

MINNEAPOLIS, MINN.—The action of the city council in allowing the park board \$3,000 out of the cycle path fund will mean that this part of the system will this year be considerably extended. Not a cent of this money will be used on the repairing of paths. That expense will be borne

out of the general fund. The entire sum will be used in building new paths along park property. One of the most important stretches will be from the foot of Lake street and to Thirty-sixth street along the shore of Lake Calhoun. The boulevard here goes over a hill, but this will be overcome for the riders by the path along the shore. The board will also connect up some unpathed portions of the Minnehaha parkway.

**DULUTH, MINN.**—The Superior Cycle Club has reached a membership of 36. These officers have been elected: President, Anthony Lund; vice-president, Adolph Richmond; secretary and treasurer, Carl Ahlroth; captain, Henry Johnson.

**ATLANTIC CITY, N. J.**—Work has commenced on the Atlantic City Coliseum Co.'s cycle track. It will be seven laps to a mile, surrounded by seating for several thousand persons.

**MERIDEN, CONN.**—At the annual meeting of the Association Wheelmen the following officers were elected for the season: President, H. L. Carpenter; vice-president, W. F. Powers; secretary, D. J. Stevens; treasurer, S. A. Tyler; captain, Clayton Nettleton; first lieutenant, Julius Augur; second lieutenant, H. W. Kingsley; board of managers, P. T. Ives, H. W. Kingsley, W. F. Powers. Chairmen of committees—Membership, L. E. Wood; social, Julius Augur; club house, B. S. Wood; suits, W. F. Powers; runs, C. S. Wood.

### Business Troubles

**WORCESTER, MASS.**—The J. J. Warren Co., 8 Washington square, has gone into the hands of a receiver. The liabilities are \$70,000 and the assets \$40,000. The cause of the embarrassment is the decline of the bicycle business, in which the company formerly had a large trade in furnishing leather equipments. There will be no suspension of business. The company was established in 1873, and became a Massachusetts corporation with a capital of \$60,000. It is thought that the company will weather the storm.

**WINONA, MINN.**—Petitions in bankruptcy have been filed in the United States court by Charles G. Doud, Roscoe T. Doud and Egbert S. Mead, as co-partners of the Winona Wood Rim Co., whose plant was destroyed by fire last summer, and these three persons named individually. The co-partnership liabilities are placed at \$48,801.64 and assets at \$1,989.33, of which \$1,906 are open accounts.

### Gossip Among the Dealers

**PHILADELPHIA, PA.**—A bicycle dealers' association has been formed for the purpose of encouraging and promoting cycling as a pastime and exercise. The association will give weekly runs during the season, offering to the participants every facility for their comfort. At the terminus of the runs will be music and refreshments, and a souvenir will be given to each rider. The first run will be on Sunday, May 4.

**ELKHART, IND.**—Negotiations are in progress for the Acme Cycle Co. for the building of a two-story factory by H. E. Bucklen. The Acme building will be 170 feet long and have a width of 50 feet.

**RIVERSIDE, CAL.**—A meeting was held last week at the F. D. French Cyclery for the purpose of organizing a cycle union for the purpose of advancing the interests of the wheelmen and cycle dealers and repairers. One of the objects is to agree upon uniform prices for repairs. The organization was completed by the forming of the Cycle Board of Trade, and the following officers were elected: S. G. Drew, president; F. D. French, secretary. A constitution and by-laws were adopted and the association starts out with a good membership. It is the intention to promote races.

**POTSDAM, N. Y.**—W. H. Walling has opened a bicycle repair shop in charge of R. D. Bottom.

**RIVERSIDE, CAL.**—The Globe Cyclery has been sold

William L. Peters to Heamond & Burke, who will continue the business.

**CLINTON, IA.**—J. G. Spahn has bought the Traub cycle repair shop.

**AURORA, ILL.**—Frank Anderson has bought the bicycle stock owned by Jacob Eye.

**WOONSOCKET, R. I.**—Charles A. Proulx, bicycle dealer, has returned to his old stand at 129 Main street. He has a finely fitted up place on the ground floor.

**THREE RIVERS, MICH.**—Fred Avery has purchased the bicycle repair business of Anson Wood and will place his brother Fred in charge of the work.

**LEXINGTON, ILL.**—A. E. Slagel & Co. have reopened their bicycle store and repair shop with a fine line of bicycles and supplies after a vacation of a year.

### Cycling Miscellany

Jimmy Michael won his first race as a jockey at Maisons Laffitte on April 25. He rode Charron's Promesse in the selling race, distance 1½ miles. The betting was 14 to 1, and there were fifteen starters. Michael won by a head.

Motor bicycles will be put to a severe test on Decoration day in a 25-mile race for them to follow the classic annual Irvington-Milburn handicap for leg-propelled cycles, now promoted by E. L. Blauvelt, of Newark. There are sixteen hills, and if the motor cycles can survive the ordeal they will have indeed proved themselves practical. The race will be a fit curtain-raiser to the great endurance run for motor bicycles from Boston to New York, to be promoted by the Metropole Cycle club.

A contract has been made for the addition of seating capacity for 1,000 additional spectators at the Washington Coliseum. Arrangements have also been made for the equipment of the track with telegraph and telephone facilities.

A woman named May Moore, who loops the loop on a bicycle, is the latest attraction at a circus now running at Madison Square Garden.

There is a possibility that the plant of the Olive Wheel Co., at Syracuse, will be placed in operation again. Francis T. Gridley, formerly a banker of that city, who practically owned the company and who has been away lately on account of financial difficulties, is said to have been offered the management of the plant by his mother, who bought it at the trustee's sale in the bankruptcy proceedings.

The growing popularity of the motor bicycle in Minneapolis was demonstrated last week by the sale of more than twenty of those made by the American Cycle Mfg. Co. Practically all of them were sold to veteran cyclists.

### Darracq Captures French Road Records

On April 16 Gabriel, driving a 20-horsepower Darracq, covered 100 kilometers (62½ miles) over the road of Salon, in 1:6:15 4-5. Baras, on a similar vehicle, covered 10 kilometers (6¼ miles), flying start, in 6:14 2-5, and the same distance, standing start, in 6:17 1-5. On the following day Jenatzky attempted to break Gabriel's record, but could do no better than 1:15:45 1-5, over a wet road. Soon after Guillaume, on a Darracq voiturette, covered the 100 kilometers in 1:36:56 1-5, record for this class of vehicles.

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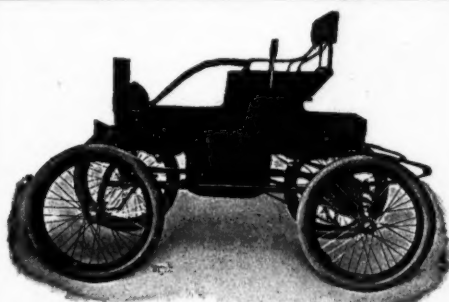
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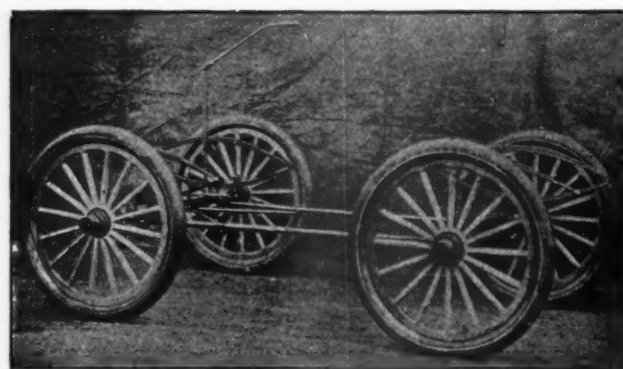
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 ASST. SECRETARY ..... Harry Unwin, 7 E. 42nd St., New York.  
 COUNSEL ..... W. W. Niles, 11 Wall St., New York.

### EXECUTIVE COMMITTEE.

Samuel T. Davis, Jr., New York; Dane E. Rianhard, New York; Chas. E. Duryea, Reading, Pa.; A. L. Riker, New York; W. C. Baker, Cleveland, O.; H. Ward Leonard, New York; Charles Clifton, Buffalo, N. Y.; F. M. Lande, New York; J. Herbert Ballentine, New York; John H. Flagler, New York; John Brisben Walker, Tarrytown, N. Y.; E. P. Wells, Keene, N. H.; J. Wesley Allison, New York; Alexander Winton, Cleveland, O.; J. W. Packard, Warren, O.

### OFFICIAL ANNOUNCEMENTS.

The agreement between the Automobile Club of America, the Madison Square Garden Co. and the N. A. A. M. provides for automobile shows to be held in New York during the third weeks in January, 1903, 1904 and 1905. The agreement provides that no other shows east of Chicago shall be sanctioned by the association.

The association will encourage at least one dealer in each place of importance to keep a shop supplied with tools and machinery, as well as oils, greases, gasoline, carbide, etc., and willing hands to help the tourist at prices as reasonable as they could get the same work done at their home or starting point. The association expects to compile a directory of storage and repair stations in all parts of the United States, and will classify these according to the equipment of the shops, and, in case of agencies, the class of carriage handled.

C. J. Field has resigned as second vice-president and member of the executive committee. Dane E. Rianhard, of the Overman Automobile Co., has been elected to the office of second vice-president, and H. Ward Leonard, of the Ward Leonard Electric Co., third vice-president. Frederic Martin Lande, of the United States Long Distance Automobile Co., will serve on the executive committee.

The constitution and by-laws are to be revised in order to meet new conditions, and the president will shortly report a revision of the standing committees.

The following have lately been elected to membership:

#### ACTIVE.

Olds Motor Works, Detroit, Mich.  
 Chicago Motor Vehicle Co., 370 Wabash avenue, Chicago.  
 Milwaukee Automobile Co., Milwaukee, Wis.  
 Freidman Automobile Co., Chicago.  
 National Sewing Machine Co., Belvidere, Ill.  
 Thos. B. Jeffery & Co., Kenosha, Wis.

#### ASSOCIATE.

C. Coles Dusenbury & Son, 396 Broadway, New York.  
 The John F. McCanna Co., 246 Wells street, Chicago.  
 The National Cement & Rubber Mfg. Co., 3059 Monroe street, Toledo, O.  
 Randolph Clowes Co., Waterbury, Conn.  
 Brown-Lipe Gear Co., Syracuse, N. Y.  
 Clark Tire Co., 405 Lakeside building, Chicago.  
 The Sartus Ball Bearing Co., 594 Broadway, New York.  
 The D. M. Steward Mfg. Co., Chattanooga, Tenn.  
 Merkel Mfg. Co., Milwaukee, Wis.  
 American Tubular Wheel Co., 5917 Penn avenue, Pittsburgh, Pa.

E. R. Thomas Motor Co., Buffalo, N. Y.  
 Mason Regulator Co., Boston, Mass.  
 Shelby Steel Tube Co., Pittsburg, Pa.  
 Newport Engineering Works, 359 Thames street, Newport, R. I.  
 Thomson McGowan, Standard Oil Co., Cleveland, O.  
 The Auto Supply Co., 310 Mott avenue, New York.  
 The Auto Buggy Top Co. of America, Noxen, Pa.  
 Weston Electrical Instrument Co., Waverly Park, N. J.  
 Demmerle & Co., 248 West Twenty-third street, New York.  
 The Central Automobile Storage & Repair Depot, 1684 Broadway, New York.

HARRY UNWIN, Assistant Secretary.

## THE WEEK'S ISSUE FROM THE PATENT OFFICE

Letters patent No. 696,975, to Omar C. Howes, of Cortland, N. Y., assignor to the Cortland Carriage Goods Co., of same place. The subject matter of this patent is a propelling and brake mechanism for vehicles. It is on the order of the coaster brake, but is designed for heavy work. The operative devices are two roller clutches of the wedge type, one locking the sprocket when it is being driven forward and the other applying the brake when the direction of drive is reversed.

### Vivinus Clutch Mechanism

Letters patent 696,284, to Alexis E. Vivinus, of Brussels, Belgium, covers a clutch mechanism designed to act between the fly wheel of the motor and a shaft from which power is transmitted to the variable speed gearing. The fly wheel is provided with a cylindrical cavity in which are located the operating parts of the clutch. The driven shaft is hollow and carries on its end opposite the fly wheel a disk, to which are pivotally connected two brake blocks arranged to act on the inner face of the cavity on the fly wheel. The brake blocks are in the form of bell-cranks, on one extension of which is the brake shoe, the other extending into the center of the disk and resting upon the enlarged conical end of a rod passing through the hollow main shaft. On the opposite end of this rod is a helical spring, so arranged that the rod is forcibly drawn through the main shaft in a direction away from the fly wheel. By this action the conical end is drawn between the arms of the brake blocks, which throws them into frictional contact with the fly wheel, thereby causing the shaft to rotate with it.

### Gear and Transmission Device

Letters patent No. 696,596, to Walter W. Robinson, of Chicago, covers various details of a motor vehicle, particularly the driving mechanism and running gear. The running gear is tubular in form, particular attention being paid to flexibility. The essential features of the driving mechanism are directness of application and lack of gearing. The motor is located slightly forward of the rear axle. The casing of the differential gear is tubular and extends for some distance along the axle. Splined on this casing, so as to be laterally movable thereon, is a friction wheel which has frictional contact with a disk on the motor and is driven thereby. As the friction wheel is movable on the gear casing in a direction perpendicular to the axial line of the driving disk it will be readily understood that the ratio of rotation between the motor and the differential gear may be varied at will by shifting the friction wheel along the face of the driving disk.

### English Clutch Patented

Letters patent No. 697,153, to James R. Madden, of Salisbury, England, covers a variable speed gear of the planetary type, the noticeable feature of which is its compactness. It gives two speeds forward and a reverse, and is controlled by two hand brakes and a clutch.

### Changeable Gear for Bicycles

Letters patent No. 697,410, to Linford E. Krotz, of Cheyenne, Wyo. This invention relates to a variable speed gearing particularly adapted to bicycles. It gives two speeds forward by means of a planetary system of gearing, the drive in one case being direct with all members locked together. The variation of the gear is by means of two studs. One of these locks the central gear to the crank, thereby giving the direct drive. The other stud locks the central gear to the frame work of the machine in such a way that this gear becomes stationary, whereupon the planetary gear, which is journaled on a stud on the crank shaft, travels around it and drives the outer member of the set at an increased speed. On the periphery of this outer member are the teeth forming the sprocket for the driving chain. The objectionable feature of this device is that no arrangement is made for shifting the gear while in motion.

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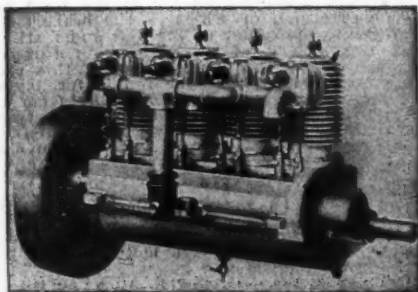
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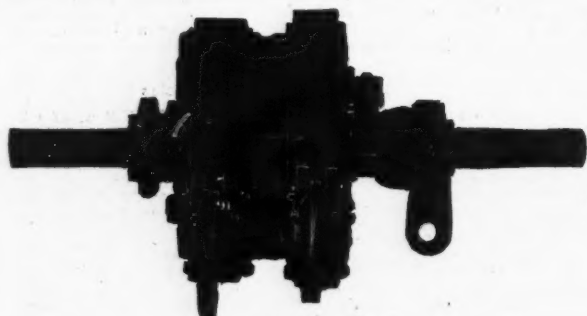
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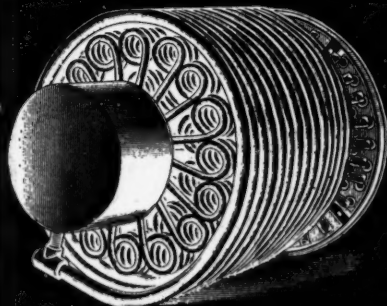
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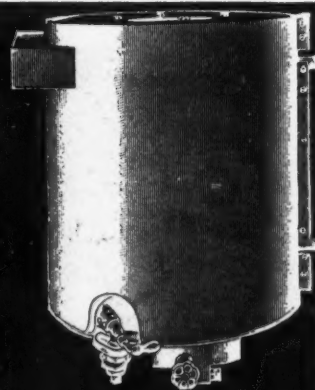
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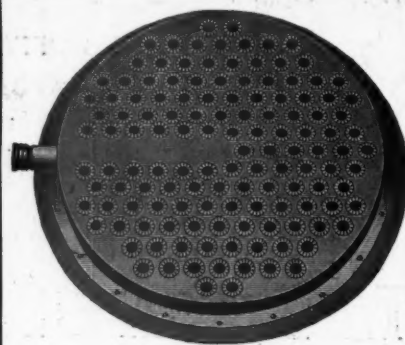


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Faith in one's own product is one of the secrets of success in marketing. We have unqualified faith in THE WOODWARD BURNER. :: It has a record of Fifteen Miles on One Gallon of Gasoline. :: Its construction is scientific. Its top plate is flexible and Tubes screw in bottom plate, and if for any cause Tubes have to be removed all that is necessary is a wrench. It makes no carbon. It cannot backfire—absolutely impossible. It makes steam so that even on hills you have enough and to spare. Its flame is blue and twelve inches long, which means that it gives more heat than other burners. It is durable—will last as long as any other part of the vehicle. We guarantee this. :: For proof of any and all claims here made we refer to the boiler itself. :: It will prove them to your satisfaction if you will give it a trial.

The Woodward Burner & Specialty Works  
1111 West Washington St. Indianapolis, Indiana



## SHELBY SEAMLESS STEEL TUBING

Is the recognized Standard  
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construction.

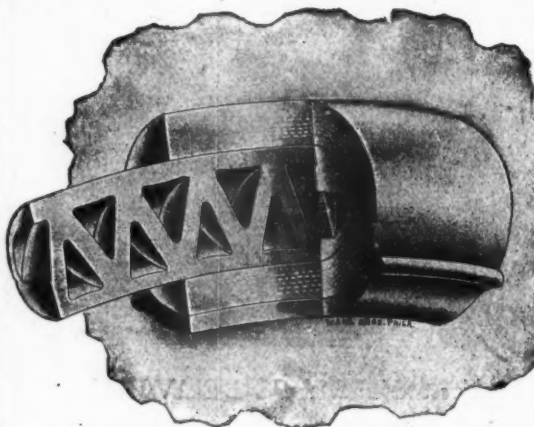
Loss in manufacture will  
be reduced to a minimum  
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secured by the use of  
**SHELBY TUBING**

**SHELBY STEEL TUBE CO.**  
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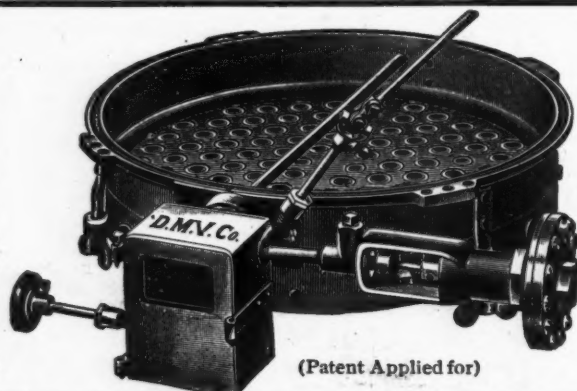


Built on the truss principle, it's strong and the strain is equally distributed.

Ample resilient yet defies destruction or disabling by puncture.

Can be used until completely worn out.

**Standard Anti-Friction Equipment Co.,**  
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(Patent Applied for)

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(PATENT APPLIED FOR)

One-piece cast-iron Burner. Can't warp or break; will not burn back or blow out. Pilot Light burns constantly while carriage is in use. Generator and Pilot Light can be attached to other burners.

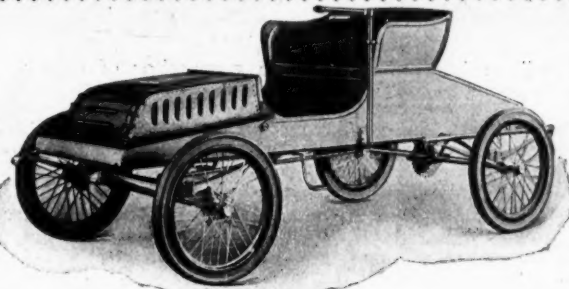
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**The Dayton Motor Vehicle Co.**

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Model G. Our Latest. With or without tonneau seats. Side, center or wheel steering.

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# Tire Troubles Stopped!

By Injecting one tube of **Automobile Neverleak** into each of your tires your tire trouble will absolutely cease. **Automobile Neverleak** will preserve the rubber and fabric and will not prevent plugging or vulcanizing, should a severe accident render such repairs necessary.

**NEVERLEAK**

is used and recommended by Tire manufacturers and is the only liquid that can be legally used in any pneumatic tire.

**BUFFALO SPECIALTY MANUFACTURING CO.**

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The only Gear built on true mechanical principle. Made in 3 standard sizes.

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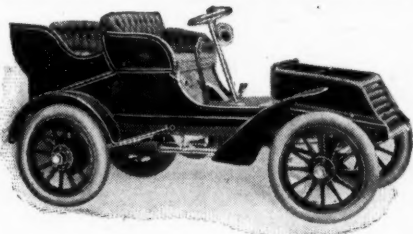
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PRICE, COMPLETE, 2000.00.

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In the Long Island 100 mile non-stop endurance contest two Wintons entered and they both won first-class certificates. One of the two captured **first honors** in the hill climbing contest in its class. **That's all.**

## THE WINTON MOTOR CARRIAGE CO.

CLEVELAND, U. S. A.

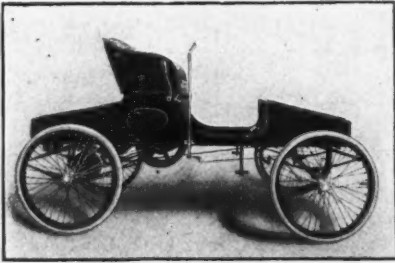

Branches and Agency Depots in the principal cities.

# == A BIT OF SENSE ==

"There is no such thing as a practical indestructible Plug" are the words used by a competitor of ours who is trying to convince the public that a cheap porcelain spark plug is the equal of our **Mica Core**. Now we will ask the reader to use **A Bit of Sense** and tell us why if such is the case, this party does not come out as we do and guarantee his plugs against breaking down for three months. Simply because he can't do it and **we can**. Now use your bit of sense and compare the two materials from which these plugs are composed, **Porcelain** and **Mica** and you will at once see the reason. Heat expansion and electric current have no effect on your **Mica Core**. Thus our claim for an indestructible lug. If you want the **very best ignition outfit made in this country**, we can supply you. If you want experiments try some of the others. Write for catalogue.

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New York Representative, Henry R. Teepe, 15 Cortlandt Street.

<p><b>"BUFFALO SR."</b> AUTOMOBILE.</p>  <p>Model 7—Price, \$800. SIX-BRAKE HORSE-POWER MOTOR. GUARANTEED.</p>	<p><b>TWO FAVORITES MADE IN BUFFALO</b></p> <p>MODEL 15. TONNEAU \$900 E. R. Thomas Motors used exclusively.</p> <p><b>BUFFALO AUTOMOBILE AND AUTO-BI COMPANY</b> 1200 NIAGARA ST. BUFFALO, N.Y.</p>	<p><b>"AUTO BI."</b> MOTOR BICYCLE.</p> <p>AGENTS WANTED. CATALOGS READY.</p> <p>Model 4—Price, \$175.</p>  <p>2½ HORSE-POWER MOTOR.</p>
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**Air Pumps, Tanks, Gauges  
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For Users  
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Automobiles  
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Manufactured by  
**GLEASON-PETERS AIR PUMP CO.**  
20 East Houston St., NEW YORK, U. S. A.

The "Locomotive" winning the Hill Climbing Contest in the Long Island Endurance Run, April 26th, 1902, was equipped with

## "LONG DISTANCE" TIRES.

These tires have been on the winning machines—both heavy and light—in every Endurance and Speed Contest entered. They are easy riding and absolutely eliminate "tire troubles."

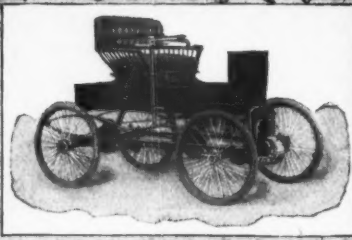
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**NOISELESS  
POWERFUL  
LIGHT  
SIMPLE  
NEAT AND  
COMFORTABLE**

**MOTORS,  
SPARKING  
PLUGS,  
AND COILS**

PRICE \$600 **CRESTMObILE.**

*"The Milwaukee"* **MOTOR VEHICLES**

**ARE**

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**MILWAUKEE AUTOMOBILE CO.**  
MILWAUKEE  
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Manufacturer of Coils, Plugs, Pumps, Carbureters, Radiators, Wheel Steering Devices, etc. **GET PRICES and CIRCULARS**

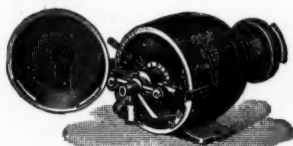
We also handle **SPLITDORF COILS and PLUGS**

**Don't Forget Dyke's Flexible Reachless Running Gear**



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Mr. Automobilist, you miss half the enjoyment of operating your machine if it is not fitted with this igniter. No worry about how long your batteries will last; no jerking by missing explosions. You can make more miles with same consumption of fuel. When buying a new machine specify this igniter. Let us send you printed matter.



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New York stock carried by Chas. E. Miller, 97 Reade St. Philadelphia office, The Bourse Chicago office, 19-21 LaSalle St.

## Gas Engine Igniters

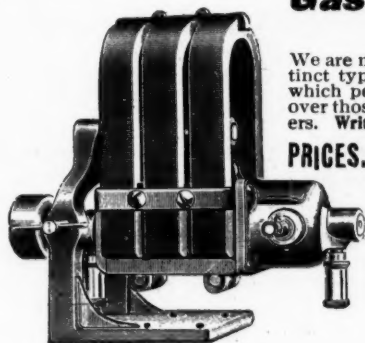
We are manufacturing three distinct types of Igniters, each of which possess many advantages over those of other manufacturers. Write us for Circulars.

**PRICES. \$12.00 TO \$15.00**

Adapted to Marine, Automobile and Stationary Engines.

**THE CARLISLE & PINCH CO.**

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## Artillery Wheels

fitted with  
**American Roller Bearings**  
Durable, Graceful, Guaranteed.

Also Single Bearings  
For Driving Axles

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For expanding 1/4-in. Copper Boiler Flues in Automobile boilers. \$3.50 Each.

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For AUTOMOBILES and LAUNCHES

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The Union Steam Pump Co., Battle Creek, Mich. Has brought out a combined Air and Water Pump; also a Single Air Pump, and a Single Water Pump for steam vehicles. They are thought of favorably by those who have used them. They are a sturdy, well-made machine.

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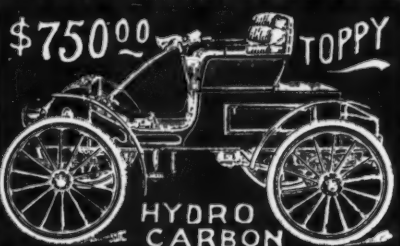
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FIT ANY CRESCENT RIM  
EASILY REPAIRED  
CANNOT RIM CUT

OUR CATALOGUE TELLS  
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## ABSOLUTE AND INSTANTANEOUS CONTROL-FOOT STARTER FROM SEAT

**STRONG LIGHT COMPACT SIMPLE SOLD THROUGH AGENTS ONLY**



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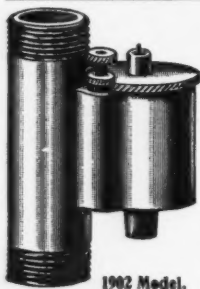
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**F**OR SALE.—8½-horsepower Winton, 1901 model, in perfect condition, with spark advancer and throttle governor; also new Apple igniter. Very fast, and held all records on Harrisburg pike last year. Price reasonable. Address JOHN M. ARCHER, Reading, Pa. 18

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If you have a gasoline engine that troubles you, or a gas engine that you wish to convert into a gasoline engine you need this Carbureter, the only reliable system for automobile or bicycle motors. Will stand any amount of vibration, is noiseless, light; no valves in motion when once adjusted to an engine; never needs to be shut off or changed.

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Stamped parts for Ball and Roller Bearings. Write for prices and samples

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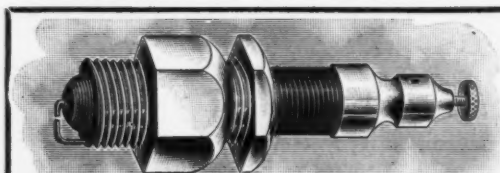


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And NO NOISE, with the **Weeber Muffler**

Made in all sizes. Low in price. Send for particulars.

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Is the best by every test. Send for Catalogue.

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Of all the light power imported cars, my judgment is that there is none superior in efficiency, reliability and construction to the 10 h. p. Georges Richard.

Actual Tests against all competitors have demonstrated the superiority of the engine, its control, economy and hill climbing abilities.

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## Graphite Compound

is indispensable for sparking plugs and for all pipe connections on steam or gasoline automobiles. It makes perfectly tight joints that can be opened at any time with ease.

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Can be Attached to Any Vehicle

WOOD WHEEL WITH ENTIRE DEVICE  
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SINGLE,  
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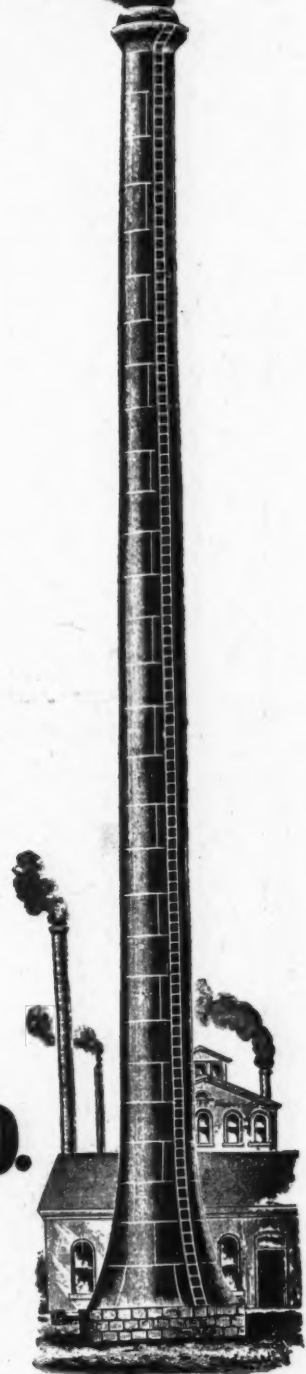


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